Attachment 4
Exhibit Log

Exhibit A
Article 16 of the Anne Arundel County Code

ARTICLE 16. FLOODPLAIN MANAGEMENT, SEDIMENT CONTROL, AND STORMWATER MANAGEMENT

Rec'd 12/9/08

Title

TITLE 1. FLOODPLAIN MANAGEMENT

Section

Subtitle 1. Definitions; General Provisions

Subtitle 2. Administrative Provisions

Subtitle 3. Development Regulations

Subtitle 4. Enforcement

State Code reference – Environment Article, Titles 4 and 5.

SUBTITLE 1. DEFINITIONS; GENERAL PROVISIONS

§ 16-1-101. Definitions.

In this title, the following words have the meanings indicated.

(1) "Accessory structure" means a structure customarily incidental and subordinate to a principal use or structure.

(2) "Basement" means any area of a building having its floor below ground level on all sides.

(3) "Breakaway wall" means a wall other than one that contains glass, that creates a temporarily enclosed space below the lowest floor, is not a part of the structural support of the building, and is intended through its design and construction to collapse under specific lateral loading forces without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system, so that the impact on the structure by abnormally high tides or wind-driven water is minimized.

(4) "Certificate of occupancy" means the official form issued by the Director of Inspections and Permits certifying that the structure has been built consistent with approved plans and may be legally inhabited or used for the intended purpose.

(5) "Development" has the meaning stated in Article 17 of this Code.

(6) "Elevation certificate" means the official form as prepared and distributed by the Federal Emergency Management Agency using mean sea level as established by the National Geodetic Vertical Datum of 1929.

(7) "Federal Emergency Management Agency" means the federal agency responsible for floodplain management, including successor agencies.

(8) "Flood" means a temporary inundation of normally dry land areas.

(9) "Flood protection elevation" and "FPE" mean the elevation of the base flood plus one foot freeboard.

(10) "Floodplain" has the meaning stated in Article 17 of this Code and also means an area subject to tidal surge or extreme tides.

(11) "Floodproofing" means any combination of structural and nonstructural additions, changes, or adjustments to properties and structures that reduces or eliminates flood damage to lands, water and sanitary facilities, and contents of buildings.

(12) "Floodproofing certificate" means a form supplied by the Federal Emergency Management Agency that is used by an applicant to certify that a building has been designed and constructed to be structurally dry-floodproofed to the flood protection elevation.

(13) "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the 100-year flood without cumulatively increasing the water surface elevation more than one foot in height.

(14) "Historic structure" means a structure that is listed on the Maryland Inventory of Historic Properties, the National Register of Historic Places, or the National Historic Landmarks.

(15) "Lowest floor" means the lowest floor of the lowest enclosed area of a structure, including a basement, but the term does not include an unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area if the enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of the Federal Emergency Management Agency, National Flood Insurance Program.

(16) "Manufactured building" means a structure transportable in one or

more sections that is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities, including manufactured homes, trailers, and other similar vehicles placed on a site for more than 180 consecutive days.

(17) "Manufactured home park" means a parcel or contiguous parcels of land divided into two or more manufactured home lots for rent or sale.

(18) "New construction" means structures for which the start of construction commenced on or after July 25, 1988.

(19) "NGVD" means the National Geodetic Vertical Datum of 1929 elevation reference points set by the National Geodetic Survey based on mean sea level.

(20) "One-hundred-year flood" means a flood that has one chance in 100 or a 1% chance of being equaled or exceeded in a given year.

(21) "One-hundred-year storm" means the level of flooding water loads, wind speeds, duration, direction, and forces that, when acting simultaneously, result in severe beach erosion and overwash and have a 1% chance of occurring each year.

(22) "Permanent construction" means any structure built or placed on a site for more than 180 consecutive days.

(23) "Principally above ground" means a condition in which at least 51% of the actual cash value of a structure, less land value, is above the finished grade.

(24) "Recreational vehicle" means a vehicle built on a single chassis that is 400 square feet or less at the longest horizontal projection; self-propelled or towable; and designed primarily for temporary living while traveling or camping.

(25) "Structure" means a walled and roofed building, and the term includes a gas or liquid storage tank, building foundation, platform, deck, swimming pool, or greenhouse that is principally above ground and affixed to a permanent site or location.

(26) "Subdivision" has the meaning stated in Article 17 of this Code.

(27) "Substantial improvement" means a repair, reconstruction, modification, or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure, either before the improvement is started or, if the structure has been damaged and is being restored, before the damage occurred. "Substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. "Substantial improvement" does not include a project for improvement of a structure to comply with State or local code specifications that are solely necessary to ensure safe living conditions; or any alteration of a historic structure.

(28) "Waiver" means a grant of relief by the Office of Planning and Zoning or the Department of Inspections and Permits from the provisions of this title. (1985 Code, Art. 21, § 1-101) (Bill No. 59-88; Bill No. 95-92; Bill No. 23-04; Bill No. 3-05; Bill No. 4-05)

§ 16-1-102. Scope.

The provisions of this title apply to all floodplain development in the County, including a manufactured building that is utilized as part of a commercial, industrial, or institutional use.

(1985 Code, Art. 21, § 1-102) (Bill No. 59-88; Bill No. 95-92)

§ 16-1-103. Conflict of laws.

Whenever a provision of this title conflicts with any other provision of law, the provision that establishes the higher standard for protection of the floodplain district shall prevail.
(1985 Code, Art. 21, § 1-103) (Bill No. 59-88)

§ 16-1-104. Liability of County.

This title does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. The County Council recognizes that larger floods can and will occur on rare occasions and that flood heights may be increased by manmade or natural causes. The grant of a permit or approval is not a representation, guarantee, or warranty, and does not create liability on the County, its officials, or employees.
(1985 Code, Art. 21, § 1-104) (Bill No. 59-88)

§ 16-1-105. Establishment of floodplain district.

(a) **District established.** A floodplain district is established and includes the areas in the County subject to inundation by the waters of the 100-year flood as determined and delineated by the Flood Insurance Study and Wave Height Study for Anne Arundel County, Maryland (Unincorporated Areas), dated November 2, 1982, and the Flood Insurance Study and Wave Height Study for the Town of Highland Beach, Maryland (Incorporated Area), dated April 15, 1982, with accompanying flood insurance rate and floodway maps by the Federal Emergency Management Agency, or other more restrictive floodplain study as approved under a building permit or subdivision approval process. The floodplain district shall be considered an overlay on any zones or districts within this County and the Town of Highland Beach. The floodplain district boundaries may vary periodically as revisions to the flood insurance study and flood insurance rate maps are made. A change in the study or maps automatically constitutes changes to the boundaries of the floodplain district on receipt by the Office of the County Executive.

(b) **Subdistricts established.** The floodplain district is comprised of the following subdistricts:

(1) "Nontidal 100-year floodplain," designated zones A2, A3, A4, A5, A6, A7, A8, A9, A10, A13, A14, and A15 on the flood insurance rate maps;

(2) "Approximated floodplain," designated zone A on the flood insurance rate maps;

(3) "Coastal floodplain," designated zones A2, A3, A4, A5, A6, A7, A8, A9, A10, A13, A14, and A15 with an elevation number (EL-) on the flood insurance rate maps;

(4) "Coastal high-hazard areas," designated zones V9, V10, V11, and V12 with an elevation number (EL-); and

(5) "Floodway," designated as floodway within the 100-year nontidal floodplain.

(c) **Zones subject to inundation by 100-year flood.** Zones designated A2, A3, A4, A5, A6, A7, A8, A9, A10, A13, A14, and A15 are subject to inundation by the 100-year flood as determined by detailed study information and profiles.

(d) **Zone A subject to inundation by 100-year flood.** Zone A is subject to inundation by the 100-year flood. The floodplain boundary is approximated because a detailed study has not been performed and water surface elevations have not been provided.

(e) **Zones subject to coastal flooding by 100-year flood.** Zones designated A2, A3, A4, A5, A6, A7, A8, A9, A10, A13, A14, and A15 with an elevation number (EL-) on the flood insurance rate maps are based on detailed studies and are subject to coastal flooding by a 100-year flood.

(f) **Zones subject to inundation by high-velocity waters and wave action.** Zones designated V9, V10, V11, and V12 with an elevation number (EL-) lie within coastal floodplains and are subject to inundation by high-velocity waters and wave action based on a detailed wave height study.

(g) **Floodways.** Floodways are shown on maps titled "flood boundary and floodway maps." Floodways lie within the nontidal 100-year floodplains.

(h) **Revisions to floodplain district.** The delineation of the floodplain district may be revised, amended, and modified by the Office of Planning and Zoning on the advice of the Director of Public Works only in compliance with the National Flood Insurance Program and the requirements of the State Department of Natural Resources when there are changes through natural or other causes or changes are indicated by future detailed hydrologic and hydraulic studies.

(i) **Changes to delineation of floodplain district.** Changes to the delineation of the floodplain district shall be subject to the review and approval of the Federal Emergency Management Agency and the Secretary of Natural Resources, except that approval is not required and elevations shall be used if there is a conflict between map boundaries and elevations that are plotted on a topographic map.

(j) **Delineation of approximated floodplain.** When other data are not required or available, the delineation of the approximated floodplain on individual residential lots may be determined by the point- on-the-boundary method as follows:

(1) the distance is scaled from a reference point at the site to the edge of the 100-year floodplain boundary indicated on the Federal Insurance Rate Map; and

(2) an elevation of the 100-year flood is then determined at that point by survey.

(k) **Notification of changes to Federal Emergency Management Agency.** As soon as practicable, but not later than six months after the date such information becomes available, the Office of Planning and Zoning shall notify the Federal Emergency Management Agency of the changes by submitting technical and scientific data in accordance with 44 CFR Part 65.

(l) **Dispute of district boundary.** Within 30 days after receipt of a written notice of a dispute concerning a district boundary, the Director of Public Works shall make an interpretation and render a decision in writing.

(m) **Review of errors.** An owner or lessee of property who believes the property has been erroneously included in a designated flood hazard zone on the flood insurance rate maps may submit scientific or technical information to the Federal

Emergency Management Agency for review for a possible map amendment.
(1985 Code, Art. 21, § 1-105) (Bill No. 59-88; Bill No. 95-92; Bill No. 23-04)

§ 16-1-106. Amendments.

This title is subject to amendment as required by the Federal Emergency Management Agency, Title 44 of the Code of Federal Regulations. All subsequent amendments to this title are subject to the approval of the Federal Emergency Management Agency and the State Department of Natural Resources.
(1985 Code, Art. 21, § 1-106)

SUBTITLE 2. ADMINISTRATIVE PROVISIONS

§ 16-1-201. Permits; plans; inspections.

(a) **Application for development generally.** An application for a subdivision, building permit, or grading permit is considered an application for development under this title. The applicant shall be informed of the provisions of this title as they may apply to the property. A building permit or grading permit may not be issued until the applicant has complied with the provisions of this title and has obtained all necessary permits from the State Water Resources Administration and other applicable State and federal agencies. Receipt of federal or State permits does not exempt development from the provisions of this title.

(b) **Application for subdivision and new development.** An application for subdivision and new development on land that includes areas within the floodplain district shall include a delineation of the 100-year flood elevation if it has been determined by the flood insurance study or other reliable source approved by the State Water Resources Administration, in addition to any 100-year floodplain determination as may be required in accordance with the provisions of Article 17 of this Code. If the 100-year floodplain elevation has not been determined and if proposed development is five acres or greater, the developer shall determine the 100-year flood elevation in accordance with the provisions of Article 17 of this Code, and delineate the elevation on the proposed plans. Plans shall be certified by a registered professional engineer and shall be reviewed by:

(1) the Department of Public Works to ensure that the proposal is consistent with the need to minimize flood damage;

(2) the Office of Planning and Zoning to ensure that necessary permits or approvals have been received from the State Water Resources Administration and appropriate federal agencies; at least one access is at an elevation that, during a 100-year flood, will provide safe vehicular access to and egress from the subdivision or new development; and adequate measures will be provided to minimize the adverse environmental impact of the proposed development;

(3) the Department of Public Works to ensure that public and private utilities and facilities, including sewer and water, are located and constructed to minimize or eliminate flood damage; and

(4) the Department of Inspections and Permits to ensure that adequate

drainage is provided to reduce exposure to flood hazard.

(c) **Application for building permit, grading permit, or other development permit.** An application for a building permit, grading permit, or other development permit for land that is included in a floodplain district shall contain the following information:

(1) for a structure to be elevated above the 100-year flood elevation, the plans shall show:

(i) the size of the proposed structure and its relation to the lot where it is to be constructed;

(ii) the elevations of the proposed final grading; the lowest floor levels, including basements, the existing ground contours and the 100-year flood elevation; and the high-velocity water and wave action elevation, including relation to the stream channel, shoreline, floodplain district, and floodplain district subdistricts, as certified by a registered professional engineer, surveyor, or other individual authorized by the State to give a certification required by this subsection;

(iii) the method of elevating the proposed structure, including details of proposed fills, pile structures, retaining walls, foundations, and erosion protection measures as prepared by a registered professional engineer or architect; and

(iv) the methods used to protect utilities, including sewer, water, telephone, electric, and gas from flooding below the 100-year flood elevation at the building site;

(2) a copy of the issued permit or a written statement from the issuing authority indicating that a permit is not required from the United States Army Corps of Engineers, State Department of Natural Resources, Wetlands Division, or State Department of Natural Resources, Waterway Permits Division, where necessary; and

(3) for a substantial improvement to an existing structure, either the current assessed value or an "as is" appraisal performed by a professional real estate appraiser of the market value of existing structure (less land value) to which the substantial improvement is associated.

(d) **Relocation or alteration of a watercourse.** When the proposed subdivision or other development includes the relocation or alteration of a watercourse, evidence shall be presented as part of the permit application that the adjacent communities and the State Coordinating Office have been notified of the proposed alteration or relocation by certified mail. Copies of these notifications shall then be forwarded to the Federal Emergency Management Agency. In addition, the project engineer shall certify to the County in writing that the flood-carrying capacity within the altered or relocated portion of the watercourse will not be affected. A waiver must be obtained from the Office of Planning and Zoning prior to a relocation or alteration of a watercourse within a floodplain district.

(e) **Inspection of site.** The site of the proposed project shall be subject to inspection by the County and the State Water Resources Administration. The Department of Inspections and Permits shall report a revocation of a building, grading, or other permit to the State Department of Natural Resources for whatever action it considers necessary.

(f) **Expiration of permit.** If work on the proposed construction does not start within 180 days after the date of issuance of the building permit, the permit shall expire, unless a time extension is granted, in writing, by the Department of Inspections and

Permits. Work on the proposed construction is considered to have started with the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured building on a foundation. Work on the proposed construction is not considered to have started with land preparation such as clearing, grading and filling, the installation of streets or walkways, excavation for basements, footing, piers, foundations, the erection of temporary forms, or the installation on the property of accessory buildings such as garages or sheds not occupied as dwelling units or not as part of the main structure. Work shall be complete within one year of the date of the permit unless an extension is granted in writing.

(g) **Progression of work.** Work on the proposed construction shall progress steadily through project completion. Any work which resumes after a stop in work for 180 days or more shall require the issuance of a new permit.

(h) **Certificate of occupancy.** A certificate of occupancy shall be required for all construction and substantial improvements in the floodplain district and shall not be issued until the Director of Inspections and Permits has been provided with a completed elevation certificate on the form provided by the Federal Emergency Management Agency and certified by a registered land surveyor or professional engineer or an individual authorized by the State to give a certification required by this subsection verifying the "as- built" elevation of the subject construction. The datum used on the elevation certificate shall be the NGVD.

(i) **Record or log of all floodplain district permit actions.** A record or log of all floodplain district permit actions shall be maintained by the Department of Inspections and Permits and shall be available on request by the Federal Emergency Management Agency or its authorized agent, the Water Resources Administration, during periodic assessments of the State participation in the National Flood Insurance Program. The record shall include at a minimum the date the permit was issued, the as-built lowest floor elevation of all new construction or substantial improvement, the issuance date of the certificate of occupancy, copy of the completed elevation certificate, and any map amendments issued by the Federal Emergency Management Agency. All permits in coastal high-hazard areas and floodways shall be tracked by property location to determine if the cumulative value of improvements over a three-year period constitutes a substantial improvement of the structure.

(1985 Code, Art. 21, § 1-201) (Bill No. 59-88; Bill No. 95-92; Bill No. 23-04)

§ 16-1-202. Waivers.

(a) **Generally.**

(1) In this subsection, "functionally dependent use" includes only docking facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long-term storage or related manufacturing facilities.

(2) A waiver granted under Article 17 of this Code for property subject to this title shall be in accordance with this section. Additionally, waivers to the provisions of this title may be granted by:

(i) the Department of Inspections and Permits for new construction of or substantial improvements to:

1. nonresidential structures or portions of nonresidential structures that will be floodproofed in a watertight fashion and meet the requirements of subsection (d)(5); and

2. detached and attached garages that are used solely for storage or parking of vehicles and designed to automatically equalize hydrostatic pressures on walls by allowing for the entry and exit of floodwater and meet the requirements of subsection (d)(6); and

(ii) the Office of Planning and Zoning:

1. for functionally dependent uses that cannot perform their intended purpose unless they are located or carried out in close proximity to water;

2. to ensure that any reconstruction, rehabilitation, or restoration does not preclude continued designation of a historic structure; and

3. for any development, new construction of, or substantial improvements to structures within the floodway, subject to the requirements of subsection (d)(9).

(b) **Waivers prohibited.** A waiver may not be granted for the placement of fill in the coastal high- hazard area; new construction of or substantial improvement to any structure located in the coastal high- hazard area; manufactured buildings within the coastal high-hazard area; or any development in a floodway that will result in an increase in the 100-year flood elevation.

(c) **Submission of request.** A request for a waiver of the provisions of this title shall be submitted in writing to the Office of Planning and Zoning or the Department of Inspections and Permits and shall be accompanied by a justification, an engineering analysis, and an acknowledgment that an increased premium rate for flood insurance may occur and that construction below the 100-year flood level increases risk to life and property.

(d) **Conditions on issuance.** The issuance of a waiver is subject to the following conditions:

(1) a showing of good and sufficient cause;

(2) an analysis showing that no reasonable alternatives exist outside the floodplain district;

(3) the stipulation that all residential structures will have the lowest floor elevated to the flood protection elevation and that all structures will withstand a 100-year flood without significant damage;

(4) a determination that the granting of a waiver will not result in increased flood heights, additional threats to public safety, or extraordinary public expense; create nuisances; cause fraud on or victimization of the public; or conflict with existing local laws or ordinances;

(5) for new construction or substantial improvements under subsection (a)(2)(i)1., certification by a registered professional engineer or architect or other individual authorized by the State to give such a certification on a floodproofing certificate that the structure will be dry floodproofed in accordance with the specifications of the U.S. Army Corps of Engineers to one foot above the 100-year flood elevation and that the nonresidential structure complies with the specifications;

(6) for new construction or substantial improvements under subsection (a)(2)(i)2.:

(i) the structure shall be constructed with appropriate building modifications to automatically equalize hydrostatic flood forces by allowing for the entry and exit of floodwaters, including that a minimum of two openings on separate sides of the structure having a total net area of at least one square inch for every square foot of enclosed area subject to flooding shall be provided; the bottom of all openings shall be no higher than one foot above grade; and openings may be equipped with screens, louvers, valves or other coverings or devices if they permit the automatic entry and exit of floodwaters;

(ii) a statement shall be placed on the building plans that reads as follows: "No conversion of this area to habitable space is to occur unless the lowest floor is elevated to one foot above the 100-year flood elevation. At this site the 100-year flood elevation is _____.";

(iii) the floor elevation of the structure may not qualify as a basement and must be constructed on or above grade;

(iv) the structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;

(v) the accessory structure shall be firmly anchored to prevent flotation that may result in damage to other structures;

(vi) the service facilities, such as electrical, plumbing, and heating equipment, shall be elevated to the 100-year flood elevation or be floodproofed; and

(vii) the applicant shall be made aware that if the structure is built below the 100-year flood elevation and is not floodproofed, the structure may be susceptible to higher insurance premium rates for the structure and its contents;

(7) for new construction or substantial improvements under subsection (a)(2)(ii)1., a determination that failure to grant the waiver would result in exceptional hardship, other than economic hardship, to the applicant;

(8) for all reconstruction, rehabilitation, or restoration of a historic structure, the work may not cause an increase in the elevation of the 100-year flood level;

(9) for all development, new construction, or substantial improvements under subsection (a)(2)(ii)3.:

(i) all residential development is prohibited;

(ii) other development may not be permitted except where the effect of such development on flood heights is fully offset by accompanying stream modification and the development is approved by all appropriate local authorities, the State Water Resources Administration, and the United States Army Corps of Engineers, and a conditional letter of map revision is received from the Federal Emergency Management Agency;

(iii) all proposals to offset the effects of development in the floodway by construction of stream modifications shall be documented by an engineering study prepared by a registered professional engineer that analyzes all reasonable alternatives and fully evaluates the effects of such construction and shall be submitted with the application for a building permit or grading permit. The report shall use the 100-year flood and floodway data as prepared by the Federal Emergency Management Agency and adopted in this title as the basis of the analysis. Any development allowed shall meet the requirements of § 16-1-302;

(iv) existing nonconforming structures or development may not be substantially improved unless the effect of the proposed improvement on flood heights is fully offset by accompanying stream modifications and the improvement is approved by the State Water Resources Administration; there is compliance with the provisions of this title and any other applicable law; the modification, alteration, repair, reconstruction, or improvement of any kind to an extent or amount of less than 50% of its market value is elevated or floodproofed to the greatest extent possible; and uses that are, or become, nuisances may not continue;

(v) a manufactured building or manufactured home park may not be placed in the floodway;

(vi) the following may not be placed or caused to be placed in the floodway: fences, except two-wire fences, and other matters or enclosures that may impede, retard, or change the direction of the flow of water or that will catch or collect debris carried by such water, or that are placed where the natural flow of the stream or floodwaters would carry the same downstream to the damage or detriment of public or private property in or adjacent to the floodplain; and

(10) receipt of a waiver from the State Water Resources Administration where applicable, favorable comments from the State Coordinating Office of the Water Resources Administration, and compliance with subsection (b).

(e) **Grant of waiver.** A waiver shall be granted only on a determination that the waiver is the minimum necessary, considering the flood hazard, to afford relief and that local public funds may not be available to mitigate any damage or loss to any development permitted pursuant to the granting of the waiver.

(f) **Notification of possible increased premium rates.** The Office of Planning and Zoning shall notify the applicant of the possible increased premium rates for flood insurance and that construction below the level of the 100-year flood increases risk to life and property. A record of the notification shall be maintained as part of the record of waiver actions as required by subsection (h).

(g) **Agreement upon grant of waiver.** The applicant or owner of storage structures, garage structures, or accessory structures for which a waiver is granted shall sign an agreement that requires that the structures will never be converted to habitable space unless elevated to the FPE and that is recorded in the land records of the County.

(h) **Record of waiver actions.** The Office of Planning and Zoning and the Department of Inspections and Permits shall maintain a record of their respective waiver actions, including justifications for their issuance; include the information in the biannual report submitted to the Federal Emergency Management Agency; and be available on request by the Federal Emergency Management Agency or its authorized agent during periodic assessments of the County's participation in the National Flood Insurance Program.

(i) **Notice of waiver on deeds or other documents conveying title.** Notice of the flood hazard and the waiver action shall be placed on the deed or other document that conveys title to newly created or recorded properties.

(1985 Code, Art. 21, § 1-202) (Bill No. 59-88; Bill No. 95-92)

SUBTITLE 3. DEVELOPMENT REGULATIONS

§ 16-1-301. Scope.

Unless waived under § 16-1-202, the provisions of this subtitle apply to development, new construction, and substantial improvements to existing structures occurring in the floodplain district. If a proposed building, structure, or substantial improvement is sited in two different subdistricts or in a subdistrict with two different 100-year flood elevations, the more restrictive regulation or the higher flood elevation shall prevail.
(1985 Code, Art. 21, § 1-301) (Bill No. 59-88)

§ 16-1-302. Nontidal 100-year floodplain.

(a) **Applicability.** This section applies to the nontidal 100-year floodplain.

(b) **Limitations within 100-year floodplain.** New structures, substantial improvement of a structure, and manufactured buildings and manufactured home parks are not allowed within the nontidal 100-year floodplain. The 100-year floodplain shall be based on the Federal Flood Insurance Study or an engineering study approved by the Department of Public Works, whichever study is the more restrictive.

(c) **Conformance with Code.** Development shall be in accordance with the provisions of Article 17 of this Code.

(d) **Conformance with other laws and regulations.** Development approved shall be in conformance with the requirements of the permit programs of the State Water Resources Administration and the United States Army Corps of Engineers, as may be applicable.

(e) **Consistent with flood hazard and watershed management plans.** Development shall be consistent with flood hazard and watershed management plans for the area in which the development is proposed to be located.

(f) **Minimizing adverse impacts.** Development shall be undertaken in a manner that minimizes adverse impact on aquatic or terrestrial habitats and related flora and fauna.

(g) **Increase in exterior dimensions of a structure.** Except for routine maintenance and repairs, if the construction, reconstruction, or modification of any structure constitutes less than a substantial improvement, but increases the exterior dimensions of the structure, the elevation of the lowest floor of the improvement shall be at least one foot above the elevation of the 100-year flood.

(h) **Waiver.** A waiver of the provisions of this title shall meet the requirements specified in § 16-1-202, and development within a floodway shall be permitted only by securing a waiver.

(i) **Conformance with Title 2.** Grading, necessary provisions for drainage, erosion, and sediment control, vegetative establishments, and requirements for fill material shall be in accordance with the provisions of Title 2 and may not increase flooding onto any properties.

(j) **Electrical, plumbing, and mechanical systems.** Electrical systems, plumbing systems, mechanical systems, and associated appurtenances, except for waterfront piers, boathouses that are not for human occupancy, and covered slips, shall be at least above the elevation of the 100-year flood, unless installed so as to be permanently flood-proofed. Electrical distribution panels shall be at least three feet above the elevation

of the 100-year flood. Installation methods shall conform to the requirements of this Code.

(k) **Storage of certain materials.** Permanent or bulk storage of materials that are hazardous, buoyant, flammable, explosive, or in times of flooding could be injurious to human, animal, or plant life are not permitted below one foot above the elevation of the 100-year flood.

(1985 Code, Art. 21, § 1-302) (Bill No. 59-88; Bill No. 95-92; Bill No. 23-04)

§ 16-1-303. Approximated floodplain.

(a) **Applicability.** This section applies to the approximated floodplain.

(b) **Enforcement within approximated floodplain.** The Department of Public Works shall obtain, review, and reasonably utilize 100-year flood elevation data available from federal, State, developer, or other sources in the enforcement of this title within the approximated floodplain.

(c) **Certain development regulations apply.** The development regulations of § 16-1-302 apply within the approximated floodplain.

(1985 Code, Art. 21, § 1-303) (Bill No. 59-88)

§ 16-1-304. Coastal floodplain.

(a) **Applicability.** This section applies to the coastal floodplain.

(b) **Certain development regulations apply.** The development regulations of § 16-1-302(c) through (k) apply to the coastal floodplain.

(c) **Elevation of lowest floor.** The elevation of the lowest floor of all new or substantially improved structures shall be at least one foot above the elevation of the 100-year flood. A basement may not be constructed in the coastal floodplain.

(d) **Construction and elevation of buildings and structures.** All buildings and structures shall be constructed and elevated as required by the flood-resistant construction section of the Anne Arundel County Building Code.

(e) **Minimum obstructions.** Buildings and structures shall be constructed and placed on the lot so as to offer the minimum obstruction to the flow and height of the floodwater.

(f) **Manufactured buildings.** Manufactured buildings shall be placed only as follows:

(1) A new manufactured building, a relocated existing manufactured building, or a building replaced due to flood damage shall be elevated on a permanent foundation so that the lowest floor of the manufactured building shall be at or above one foot above the elevation of the 100-year flood.

(2) Adequate surface drainage and access for a manufactured building hauler shall be provided.

(3) If a manufactured building is to be elevated on pilings, the lot shall be large enough to permit steps, pilings shall be placed in stable soil no more than 10 feet apart, and reinforcement shall be provided for pilings more than six feet above ground level.

(4) In order to resist flotation, collapse, lateral movement, and wind forces, each manufactured building shall be securely anchored to a properly anchored

permanent foundation in accordance with the following:

(i) over-the-top or frame ties to ground anchors may be used;

(ii) pilings or columns shall be used to maintain storage capacity of the floodplain;

(iii) concrete block support pilings shall be reinforced by placing reinforcing bars inside and extending them into the footing, filling the hollows with cement, and using mortar to cement the blocks together; and

(iv) the Federal Emergency Management Agency Publication #85 "Manufactured Home Installation in Flood Hazard Areas" shall be consulted for specific recommendations.

(5) Any addition to a manufactured building shall be similarly elevated and anchored.

(6) The owner or operator of a manufactured home park or subdivision shall file with the County Emergency Management Office an evacuation plan that indicates alternate vehicular access and escape routes.

(g) **Enclosures below lowest floor.** Enclosures below the lowest floor shall be constructed only as provided in this subsection. Any new construction of or substantial improvements to fully enclosed areas below the lowest floor, including crawl spaces, solid footings, and continuous foundations, shall be designed to meet or exceed the following minimum criteria: a minimum of two openings having a total net area of at least one square inch for every square foot of enclosed area subject to flooding shall be provided; the bottom of all openings shall be no higher than one foot above grade; and openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
(1985 Code, Art. 21, § 1-304) (Bill No. 59-88; Bill No. 95-92; Bill No. 23-04)

§ 16-1-305. Coastal high-hazard area.

(a) **Applicability.** This section applies to the coastal high-hazard area.

(b) **Certain development regulations apply.** The development regulations of § 16-1-304 applies to the coastal high-hazard area.

(c) **Land below elevation of 100-year flood.** Land that is below the elevation of the 100-year flood may not be developed unless the new construction or substantial improvement:

(1) is located landward of the reach of the mean high tide;

(2) is elevated on adequately anchored pilings or columns to resist flotation, collapse, and lateral movement due to the effects of the 100-year wind and water loads acting simultaneously on all building components, and the bottom of the lowest horizontal structural members of the lowest floor, excluding the pilings or columns, is elevated to at least one foot above the 100-year flood elevation if water-loading values are those associated with the base flood; wind-loading values are those required by local building standards; and slabs and other at-grade foundation systems are not used;

(3) has been certified by a registered professional engineer or architect that it is securely anchored to adequately anchored pilings or columns in order to withstand velocity waters and hurricane wave wash and will meet the requirements of subsection (c)(2);

(4) has no basement and has the space below the lowest floor free of obstructions or is constructed with breakaway walls, as provided in subsection (g); and

(5) does not utilize fill for structural support of buildings or structures.

(d) **Existing nonconforming uses or structures.** Existing nonconforming uses or structures located on land that is below the elevation of the 100-year flood shall not be expanded vertically, horizontally, or otherwise unless in full compliance with this title and all other applicable provisions of this Code.

(e) **Manufactured buildings.** Manufactured buildings and manufactured home parks may not be placed in the coastal high-hazard area.

(f) **Recreational vehicles.** Elevation and anchoring requirements do not apply to a recreational vehicle that is located on the site for less than 180 consecutive days per year; is fully licensed and ready for highway use; is properly permitted; is attached only by quick-disconnect utilities; and has no permanently attached additions.

(g) **Breakaway walls.** A breakaway wall shall have a designed safe loading resistance of at least 10 and no more than 20 pounds per square foot. A breakaway wall that exceeds this safe loading resistance is permitted only if a registered professional engineer or architect certifies that the wall will collapse under a force less than that exerted by the 100-year storm without jeopardizing the structural integrity of the supporting foundation. When the safe loading resistance exceeds 20 pounds per square foot, but is certified to collapse under a force less than that exerted by a 100-year storm, the designed resistance must be stated clearly and certified independently on the building plans.

(h) **Parking, building access, and storage.** The temporarily enclosed space created by a breakaway wall shall be no lower than grade and usable only for parking of vehicles, building access, or storage. If a separate storage area is provided at grade, the storage area may not exceed 300 square feet.

(1985 Code, Art. 21, § 1-305) (Bill No. 59-88; Bill No. 95-92; Bill No. 23-04)

§ 16-1-306. Utilities.

(a) **Applicability.** In the entire floodplain district, the design, placement, and construction of all public and private utilities and facilities shall comply with this section.

(b) **Water supply systems, sanitary sewage, and onsite waste disposal systems.** New or replacement water supply systems and sanitary sewage shall be designed and floodproofed to eliminate or minimize infiltration of floodwaters and discharges from the systems into floodwaters to avoid impairment during flooding and minimize flood damage. Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(c) **Gas, electrical, and other facility and utility systems.** Gas, electrical, and other facility and utility systems shall be located, constructed, and floodproofed, to eliminate or minimize potential for flood damage.

(d) **Storm drainage facilities.** New storm drainage facilities within and leading to or from the floodplain district shall be adequately designed, floodproofed, and installed to eliminate or minimize potential for property damage resulting from the floodwaters of the 100-year flood and to minimize adverse environmental impact of their installation and use.

(1985 Code, Art. 21, § 1-306) (Bill No. 59-88)

§ 16-1-307. Accessory structures.

(a) **Exemption from elevation or dry floodproofing standards.** Detached garages, storage structures, and other accessory structures containing less than 300 square feet and no more than one story are exempt from the elevation or dry floodproofing standards of this title if the structures comply with the provisions of this section.

(b) **Statement in building plans.** A statement shall be included on the building plans that reads as follows: "No enlargement or conversion of this area to habitable space is to occur unless the lowest floor is elevated to one foot above the 100-year flood elevation. At this site the 100-year flood elevation is ___."

(c) **Floor elevation.** The floor elevation of the accessory structure may not qualify as a basement and shall be constructed on or above grade.

(d) **Standards for placement and design.** The accessory structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters; shall be firmly anchored to prevent flotation that may result in damage to other structures; shall be designed to have low flood damage potential, including provisions to allow free flow of water into and out of the structure to maintain equal pressure; shall have electrical, mechanical, and plumbing systems and appurtenances in conformance with § 16-1-302(j); and may not be constructed unless a waiver is granted under § 16-1-202.

(e) **Notification regarding flood insurance.** The Department of Inspections and Permits shall notify the applicant that flood insurance for a structure not elevated or floodproofed in conformance with this title may be available only at prohibitive rates or not at all.

(1985 Code, Art. 21, § 1-307) (Bill No. 59-88; Bill No. 95-92; Bill No. 23-04; Bill No. 4-05)

§ 16-1-308. Piers; boathouses; covered slips.

Piers, boathouses, and covered slips that are not to be used for human habitation are not subject to the floodproofing requirements of this title.

(1985 Code, Art. 21, § 1-308) (Bill No. 59-88)

SUBTITLE 4. ENFORCEMENT

§ 16-1-401. Injunctive relief.

The Department of Inspections and Permits and the Office of Planning and Zoning may enforce the provisions of this title through injunctive proceedings or any other appropriate proceedings. A court of competent jurisdiction may issue a restraining order, interlocutory or final injunction, or other appropriate form of relief to restrain or correct violations of this title.

(1985 Code, Art. 21, § 1-401) (Bill No. 59-88; Bill No. 95-92)

§ 16-1-402. Duty to correct.

The imposition of a fine or imprisonment for a violation of this title does not

excuse the violation or permit it to continue and a person convicted of a violation of this title shall correct or remedy the violation within a reasonable time.
(1985 Code, Art. 21, § 1-402) (Bill No. 59-88)

§ 16-1-403. Noncomplying structures.

(a) **Declaration of unsafe structures.** The Department of Inspections and Permits shall declare a structure that is constructed, enlarged, altered, or relocated in violation of this title to be an unsafe structure and abatable as an unsafe structure and immediately notify the Federal Emergency Management Agency and the State Water Resources Administration in writing of any structure or property in violation of this title.

(b) **Denial of insnrance.** New or renewal National Flood Insurance shall be denied for any structure remaining in violation or situated on property in violation of this title.
(1985 Code, Art. 21, § 1-403) (Bill No. 59-88)

TITLE 2. GRADING AND SEDIMENT CONTROL

Section

Subtitle 1. Definitions; General Provisions

Subtitle 2. Grading Permit and Surface Mining Sediment Control Permit

Subtitle 3. Basic Design Requirements

Subtitle 4. Grading Operations

Subtitle 5. Inspections

Subtitle 6. Enforcement; Penalties

SUBTITLE 1. DEFINITIONS; GENERAL PROVISIONS

§ 16-2-101. Definitions.

In this title, the following words have the meanings indicated.

(1) "Acceptable outfall" means the tidewater or that point determined by the Department of Public Works at which stormwater can be released to a channel without causing scouring, erosion, or the resulting sedimentation to the receiving channel or its floodplain, including, where necessary, structural and vegetative measures to ensure nonerosive velocities.

(2) "Agricultural land management practices" means those methods and procedures used in the cultivation of land that further crop and livestock production and conservation of related soil and water resources, including best management practices in accordance with a soil conservation and water quality plan that has been reviewed and approved by the Anne Arundel Soil Conservation District and is implemented by May 13, 1991, but the term does not include logging and timber removal operations that disturb more than 5,000 square feet of land.

(3) "As-built plans" means plans that are drawn to the same scale as the approved plan and that:

(i) show that the location, dimensions, elevations, and status of the resulting grading, drainage structures, drainage systems, and erosion and sediment control practices, including vegetative measures, are in substantial conformance with the previously approved detailed development plans and specifications; and

(ii) note the deviations from the approved plans.

(4) "ASTM" means the American Society for Testing and Materials.

(5) "Bedrock" means the solid undisturbed rock in place either at the ground surface or beneath surficial soil deposits.

(6) "Bench terrace" means an area having less than a 2% grade that is constructed on sloping land to planned dimensions and grades.

(7) "Best management practices" means conservation practices or systems of practices and management measures that control soil loss and reduce water quality degradation caused by nutrients, animal waste, toxics, and sediment, including strip cropping, terracing, contour stripping, grass waterways, animal waste structures, ponds, minimal tillage, grass and naturally vegetated filter strips, and proper nutrient application measures.

(8) "Bog" has the meaning stated in Article 18 of this Code.

(9) "Bog protection area" has the meaning stated in Article 18 of this Code.

(10) "Bog protection plan" has the meaning stated in Article 17 of this Code.

(11) "Borrow pits" has the meaning stated in Article 18 of this Code.

(12) "Buffer" has the meaning stated in Article 18 of this Code.

(13) "Certification" means a signed, written statement by a design professional, under seal, that specific constructions, inspections, or tests have been performed and that they comply with the applicable requirements of this title.

(14) "Clearing" has the meaning stated in Article 17 of this Code.

(15) "Combustion ash" has the meaning stated in Article 18 of this

Code.

(16) "Commercial harvesting" means a commercial forestry operation including all commercial cutting operations undertaken by companies and private individuals for economic gain that alters the existing composition or profile of a forest.

(17) "Compaction" means densification of a soil or rock fill by mechanical or other acceptable procedures.

(18) "Conservation easement" means a non-possessory interest in land that restricts the manner in which the land may be developed in order to reserve natural resources for future use.

(19) "Critical area" has the meaning stated in Article 18 of this Code.

(20) "Cut" has the same meaning as excavation.

(21) "Department" means the Department of Inspections and Permits.

(22) "Design professional" means a professional engineer, professional land surveyor, or a professional landscape architect.

(23) "Developed woodland" has the meaning stated in COMAR, 27.01.05.01.

(24) "Developer" has the meaning stated in Article 17 of this Code.

(25) "Development" has the meaning stated in Article 17 of this Code.

(26) "Diameter at breast height" means the diameter of the trunk of a tree, as measured at a distance of 4.5 feet (137.15 centimeters) above original grade.

(27) "Director" means the Director of Inspections and Permits.

(28) "Disturbance" has the meaning stated in Article 17 of this Code.

(29) "Diversion" means a channel, ditch, or ridge constructed across a slope which intercepts and diverts surface runoff.

(30) "Embankment" means a deposit of soil, rock, or other materials placed by humans.

(31) "Erosion" means the process by which the ground surface is worn away by the action of wind, water, ice, or gravity.

(32) "Estimated cost" means the total cost estimated by the Department of Inspections and Permits based on unit prices adopted by the Director under § 16-2-207.

(33) "Excavation" means an act, or the conditions resulting from an act, by which soil or rock is cut into, dug, quarried, uncovered, removed, displaced, or relocated.

(34) "Excess stormwater runoff" means any increase in stormwater resulting from:

(i) an increase in the imperviousness of the site, including all additions to buildings, roads, and parking lots;

(ii) changes in permeability caused by compaction during construction or modifications in contours, including the filling or drainage of small depression areas;

(iii) alteration of drainageways or regrading of slopes;

(iv) destruction of forest; or

(v) installation of collection systems to intercept street flows or to replace swales or other drainageways.

(35) "Existing grade" means the vertical location of the existing ground

surface prior to excavating or filling.

(36) "Fill" has the same meaning as embankment.

(37) "Finished grade" means the final grade or elevation of the ground surface conforming to the proposed design.

(38) "Floodplain" has the meaning stated in Article 17 of this Code and also means an area subject to tidal surge or extreme tides.

(39) "Forest" has the meaning stated in Article 17 of this Code.

(40) "Grading" means to cause the disturbance of the earth, and the term includes clearing, excavating, filling, including hydraulic fill, stockpiling of earth materials, grubbing, rootmat or top soil disturbance, or a combination of any of these operations, and logging and timber removal operations that disturb more than 5,000 square feet of land.

(41) "Grading permit" means a permit issued to authorize grading to be performed in accordance with this title.

(42) "Grubbing" means removing roots or stumps from the earth.

(43) "Habitat protection area" has the meaning stated in Article 17 of this Code.

(44) "Highly erodible soils" has the meaning stated in Article 17 of this Code.

(45) "Hydrophytic vegetation" means those plants cited in the text "Vascular Plant Species Occurring in Maryland Wetlands" (Dawson, F., et al., 1985) that are described as growing in water or on a substrate that is periodically deficient in oxygen as a result of excessive water content.

(46) "Impervious surface" has the meaning stated in Article 18 of this Code.

(47) "Linear project" has the meaning stated in Article 17 of this Code.

(48) "Load-bearing fill" means a facility, earthwork, or fill placed in a controlled manner to support structural foundations or vehicular traffic, the instability of which would constitute a public hazard or nuisance.

(49) "Material processing plant" means a site containing any buildings, equipment, or facilities utilized in crushing, shaking, screening, washing, drying, or mixing operations involving the processing of soil, sand, gravel, or stone or any combination of these products.

(50) "Mean high-water line" has the meaning stated in Article 18 of this Code.

(51) "Natural features" has the meaning stated in Article 17 of this Code.

(52) "Natural vegetation" means those plant communities that develop in the absence of human activities.

(53) "Nontidal wetlands" has the meaning stated in the Environment Article, § 5-901, of the State Code.

(54) "One-hundred foot upland buffer" has the meaning stated in Article 18 of this Code.

(55) "Permittee" means a person in whose name a grading permit is issued under this title.

(56) "Plan" means schematic drawings and a phasing schedule that

depict the work to be accomplished under a grading permit and that has been prepared by a design professional in accordance with this title in a form acceptable to the Department and the Anne Arundel Soil Conservation District.

(57) "Potential sand and gravel deposits" means sand and gravel deposits existing under land that is currently undeveloped and is zoned for extractive use.

(58) "Professional engineer" means an engineer registered by the State to practice professional engineering in accordance with the provisions of the Business Occupations and Professions Article, Title 14, of the State Code.

(59) "Professional land surveyor" means an individual who has been registered and licensed in accordance with the provisions of the Business Occupations and Professions Article, Title 15, of the State Code.

(60) "Professional landscape architect" means an individual who has been registered and licensed by the State to practice landscape architecture in accordance with the Business Occupations and Professions Article, Title 9, of the State Code.

(61) "Responsible personnel" means any foreperson, superintendent, project engineer, or other individual in charge of onsite grading operations or sediment control associated with earth changes or disturbances.

(62) "Retention" means the deliberate holding and protecting of existing trees, shrubs, and plants on a site.

(63) "Sediment" means soil or other surficial material transported by wind or surface water as a product of erosion.

(64) "Sensitive area" means:

(i) a shoreline, or a perennial stream, creek, river, bay, pond, lake, or other similar body of water, excluding intermittent bodies of water, as shown on the United States Coast and Geodetic Survey 7.5 minute quadrangle maps;

(ii) wetlands, including bogs; and

(iii) a bog protection area.

(65) "Site" means the portion of a lot or parcel of land, or combination of contiguous lots or parcels of land, on which grading is performed or permitted.

(66) "Site improvement" means storm drains, roads, curbs and gutters, concrete work, stabilization, stormwater management facilities, and other structural improvements.

(67) "Slope" means the inclined exposed surface of a fill, excavation, or natural terrain.

(68) "Soil" means earth material of whatever origin that overlays bedrock including the decomposed zone of bedrock that can be readily excavated by mechanical equipment.

(69) "Standards and Specifications" means the Maryland Standards and Specifications for Soil Erosion and Sediment Control, the Anne Arundel County Department of Public Works Design Manual, and the Anne Arundel County Standard Specifications and Standard Details for Construction, all as amended and revised.

(70) "Steep slope" has the meaning stated in Article 17 of this Code.

(71) "Stop-work order" means an order issued by the Department that directs any activity or work that violates any provision of this title to cease immediately.

(72) "Structural rock fill" means a fill constructed predominantly of rock material or broken concrete free of any other materials for the purpose of supporting

a structure.

(73) "Surface mining sediment control permit" means a permit issued for a clay and borrow pit or a sand and gravel operation that authorizes grading to be performed at the site of the pit or operation in accordance with the provisions of this title.

(74) "Tidal wetlands" means "private wetlands" or "state wetlands" as defined in the Environment Article, § 16-101, of the State Code.

(75) "Tributary streams" has the meaning stated in Article 17 of this Code.

(76) "Type 1 fill" means a load-bearing fill proposed for support of a building, wall, or other structure the function of which will be especially impaired by settlement.

(77) "Type 2 fill" means a load-bearing fill proposed for support of a roadway, pavement, utilities lines, or structure that will not be especially impaired by moderate settlement.

(78) "Type 3 fill" means a common fill proposed for landscaping or for another non-load- bearing use.

(79) "Watercourse" means a natural or artificial watercourse including a stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine, or wash, in which water flows in a definite direction or course whether continuously or intermittently, and the term includes an area adjacent to a watercourse that is subject to inundation by reason of overflow or floodwater.

(80) "Woodland" means any naturally occurring or planted group of trees.

(1985 Code, Art. 21, § 2-101) (Bill No. 49-88; Bill No. 94-88; Bill No. 90-89; Bill No. 13-90; Bill No. 22-91; Bill No. 61-93; Bill No. 71-94; Bill No. 101-94; Bill No. 104-97; Bill No. 20-00; Bill No. 12-00; Bill No. 105-01; Bill No. 15-02; Bill No. 60-02; Bill No. 49-03; Bill No. 23-04; Bill No. 3-05; Bill No. 4-05)

§ 16-2-102. Interpretation.

The provisions of this title are minimum requirements in addition to other requirements.

(1985 Code, Art. 21, § 2-103) (Bill No. 90-89)

§ 16-2-103. Liability for damages.

The issuance of a grading permit under the provisions of this title or compliance with the provisions of this title does not relieve a person from responsibility for damage to persons or property otherwise imposed by law or impose liability on the County for damages.

(1985 Code, Art. 21, § 2-104) (Bill No. 90-89)

§ 16-2-104. Revolving funds.

The Controller may allow an expenditure from a revolving fund established for the purposes of this title to support the cost of work undertaken by the County under the provisions of § 16-2-602. The County Council may authorize additional revenues to be

paid into this fund.
(1985 Code, Art. 21, § 2-105)

§ 16-2-105. Waivers.

(a) **Waivers permitted.** The Director may waive or modify a provision of this title that is not required by State law if strict adherence would result in unnecessary hardship and the waiver does not contravene the purposes of this title.

(b) **Submission of request.** The applicant shall submit a written request for a waiver to the Director and to the Anne Arundel Soil Conservation District, if the District's approval is required, stating the specific waiver requested and the reason for the request.

(c) **Additional conditions permitted.** In waiving or modifying a provision of this title, the Director may impose additional conditions on the permittee to secure the objectives of the provision that has been waived.

(d) **Written findings.** The Director shall make written findings that requirements of this section have or have not been met when granting or denying a waiver and may attach conditions for approval of a waiver request.
(1985 Code, Art. 21, § 2-105.1) (Bill No. 90-89; Bill No. 71-94; Bill No. 3-05)

§ 16-2-106. Administrative appeals.

(a) **Applicability.** This section applies to all grading permits issued within the buffer or expanded buffer. Otherwise, this section applies only to grading permits that are issued for sites that are two or more acres in size and on which clearing or grading will result in the loss or diminution of substantial and significant natural features or irreparable environmental harm.

(b) **Limitation on applicability.** This section does not apply to a grading permit for a single lot that is part of a larger site with an active or completed grading permit that provides for site improvements and future development of single lots unless the lot is within the buffer or expanded buffer.

(c) **Appeal generally.** A person aggrieved by the issuance of a grading permit by the Director may appeal the issuance of the permit to the Board of Appeals.

(d) **Time to file; stay of permit.** An appeal shall be filed within 25 days of the permit's issuance. The timely filing of an appeal within 25 days after the issuance of the grading permit automatically stays the permit pending the final disposition of the appeal by the Board of Appeals.

(e) **Developer response.** The developer may file a response to the request.

(f) **Decision.** Within 30 working days of the filing of the appeal, the Board of Appeals shall hear and decide the appeal. If the Board fails to make a decision within 30 working days, the stay shall be terminated and may not be reinstated by the Board.
(1985 Code, Art. 21, § 2-106) (Bill No. 98-87; Bill No. 90-89; Bill No. 105-91; Bill No. 8-92; Bill No. 120-96; Bill No. 104-97)

SUBTITLE 2. GRADING PERMIT AND SURFACE MINING SEDIMENT CONTROL PERMIT

§ 16-2-201. Permit required; exceptions.

(a) **Permit required.** Except as provided in subsection (b), a person may not perform clearing, stripping, excavating, or grading of land or create borrow pits, spoil areas, quarries, material processing plants or related facilities without first obtaining a grading permit or a surface mining sediment control permit from the Department. An owner of real property may not permit grading or the creation of borrow pits, spoil areas, quarries, material processing plants or related facilities on the real property owned unless a grading permit or a surface mining sediment control permit to perform the enumerated work has been obtained.

(b) **Exceptions.** A grading permit is not required for the following if the other provisions of this title and of applicable State law are satisfied:

(1) grading activities associated with commercial or residential construction on a lot on which the following conditions exist:

(i) the lot is on a paved, graveled, or publicly maintained street where storm drainage facilities are in operation and roadside ditches stabilized;

(ii) stormwater management facilities are not required on the lot;

(iii) not more than 15,000 square feet will be disturbed during development, except as follows:

1. in the critical area, not more than 5,000 square feet will be disturbed; and

2. in a bog protection area, development that does not disturb more than 5,000 square feet and that has not previously been given an exemption under this section;

(iv) slopes of 15% or greater will not be disturbed;

(v) development will take place on no more than three contiguous lots at one time, provided that the limitations established by the Standards and Specifications are not exceeded;

(vi) the proposed grading will not impair existing surface drainage, constitute a potential erosion hazard, or act as a source of sedimentation to any adjacent land or watercourse;

(vii) grading will not take place in the buffer required by § 16-2-301 or within 100 feet of the mean high-water line of a body of water affected by tidal action, including tidal wetlands and tributary streams in the critical area;

(viii) any conditions established by the Department and the Anne Arundel Soil Conservation District in a standard grading plan;

(ix) the applicant has filed a standard grading plan application and has certified that construction will meet the conditions and limitations established on the standard grading plan and will be carried out in compliance with this title; and

(x) the standard grading plan application is approved by the Department;

(2) accepted agricultural land management practices and construction of agricultural structures;

(3) except for a clay and borrow pit or sand and gravel operation that is a legal nonconforming use or is required to have obtained a special exception before commencement of its operation, the stockpiling of raw or processed soil, sand, stone, and

gravel with slopes at a natural angle of repose at quarries, and operations that are performed on cleared or unstabilized sites at concrete, asphalt, and material processing plants and construction storage yards, provided that:

(i) the Anne Arundel Soil Conservation District has approved a plan for the site;

(ii) sediment control measures have been utilized to protect against offsite damages in accordance with the provisions of this title and the approved plan; and

(iii) the Department may require a grading permit if the Department considers it necessary;

(4) except for clay and borrow pits and sand and gravel operations, clearing and grading activities that are required to obtain a permit or license under State law, including rubble fills and sanitary landfills, if those activities have the permit or license required by the State, except that a grading permit is required for any disturbed areas outside the scope of a State permit or license;

(5) grading and trenching for the following utility installations, provided no more than 5,000 square feet of land is disturbed, the grading or trenching does not change the natural contour, and damaged, destroyed, or disturbed erosion and sediment control measures are restored to their original condition: a utility installation within a highway right-of-way; a utility easement immediately adjacent to a road or street right-of-way; or a utility easement in an area abutting a road or street right-of-way that accommodates a housing connection;

(6) grading and related earthwork incidental to an individual water well and individual sewage disposal system installed under a permit from the appropriate public authority, provided the grading and related earthwork do not change the natural contour and disturbed areas are stabilized to prevent erosion within 72 hours from initial disturbance;

(7) grading on an existing developed lot or parcel for maintenance of landscaping purposes only if:

(i) the aggregate area affected or bared at one time does not exceed 5,000 square feet;

(ii) the average grade change does not exceed 12 inches and does not alter the drainage pattern so as to create a hazardous condition or a source of sedimentation to any stream or watercourse; and

(iii) bare earth is promptly seeded, sodded, or otherwise effectively protected from erosive actions;

(8) an authorized County capital improvement project or public improvements installed or constructed by the Department of Public Works or under the supervision of the Department of Public Works, provided that for a project that disturbs more than 5,000 square feet of land the erosion and sediment control plan shall be approved by the Anne Arundel Soil Conservation District, except in the critical area, unless disturbance does not involve developed woodlands, forests, tidal wetlands, nontidal wetlands, buffers, highly erodible soils, or habitat protection areas; and

(9) clay and borrow pits and sand and gravel operations that are operating under a surface mining sediment control permit.

(c) **Grading permit for logging.** A person may not perform logging unless

the person has a grading permit for logging. If determined to be appropriate by the Department, an applicant for a grading permit for logging may use the standard erosion and sediment control plan for forest harvest operations that shall be submitted to the Anne Arundel Soil Conservation District. On approval by the Soil Conservation District, the Office of Planning and Zoning, and the Department, a grading permit for logging shall be issued.
(1985 Code, Art. 21, § 2-201) (Bill No. 19-87; Bill No. 49-88; Bill No. 90-89; Bill No. 22-91; Bill No. 61-93; Bill No. 105-01; Bill No. 23-04; Bill No. 19-05)

§ 16-2-202. Scope of permit.

(a) **Generally.** Subject to the provisions of § 16-2-215 and subsections (b) and (c), a grading permit or a surface mining sediment control permit authorizes only the improvements set forth in the permit application and accompanying plans. An application and grading permit may cover a number of contiguous lots.

(b) **Surface mining sediment control permits.** Except for clay and borrow pits or sand and gravel operations that are exempted by the Environment Article, Title 15, of the State Code, an applicant for a surface mining sediment control permit is not required to submit the plans and specifications required by § 16-2-204(a)(2) as a condition for the issuance of a permit for any area that has received approval from the Anne Arundel Soil Conservation District as part of an application for a surface mining permit to operate in accordance with the Environment Article, Title 15, of the State Code, but is required to provide a copy of the approved plans and specifications to the Department.

(c) **Requirements for surface mining sediment control permits.** Except as otherwise set forth in this title, all requirements for a grading permit set forth in this title apply to surface mining sediment control permits.
(1985 Code, Art. 21, § 2-202) (Bill No. 90-89; Bill No. 22-91; Bill No. 23-04)

§ 16-2-203. Application – By whom made.

Application for a grading permit shall be made by the owner, lessee, or developer of the real property or by the design professional employed in connection with the proposed work. If the application is made by a person other than the owner in fee, it shall be accompanied by a notarized affidavit of the owner or the qualified person making the application that the proposed work is authorized by the owner in fee and that the applicant is authorized to make such application. The full names and addresses of the owner, lessee, or developer and of the responsible officers, if the owner, lessee, or developer is a corporate body, shall be stated in the application.
(1985 Code, Art. 21, § 2-203) (Bill No. 90-89)

§ 16-2-204. Application – In general.

(a) **Submission.** Before the issuance of a grading permit, the original application shall be submitted to the Department together with the number of copies of the application required by the Department. The application shall be accompanied by the following:

(1) a general information statement of the project that complies with the provisions of § 16-2-205;

(2) plans and specifications that comply with the provisions of § 16-2-206 and a site development plan in accordance with the requirements of §§ 17-4-101 et seq. of this Code;

(3) the application fee and the permit fee;

(4) when applicable, the written approval of the State Department of Natural Resources, the State Department of the Environment, and the United States Army Corps of Engineers;

(5) security that complies with the provisions of § 16-2-208; and

(6) a right of entry to the County for the purpose of inspection until completion and for restoration of the site on failure of the permittee or other responsible person to restore the site.

(b) **Application fee.** An applicant for a permit issued under this title shall pay a nonrefundable application fee at the time of application. The fee is $25.

(c) **Expiration of application.** An application for which all required documents have not been submitted within one year after initial filing may be considered by the Department to have expired and the Department may withhold issuance of a permit.

(1985 Code, Art. 21, § 2-204) (Bill No. 90-89; Bill No. 46-92; Bill No. 3-05)

§ 16-2-205. Information statement.

A general information statement accompanying a grading permit application shall consist of the following:

(1) the proposed area of development;

(2) the proposed grading to be accomplished;

(3) the provision for drainage, erosion, and sediment control and vegetative establishments; and

(4) any conservation easements, wildlife easements or corridors, buffers, areas not to be disturbed, and replanting areas to be provided.

(1985 Code, Art. 21, § 2-205) (Bill No. 49-88)

§ 16-2-206. Plans and specifications.

(a) **Preparation.** Plans and specifications shall be prepared by a design professional in accordance with the Standards and Specifications. The Department may require that any additional reports or data be prepared by a design professional.

(b) **Contents.** Except as provided in subsection (d), the plans and specifications accompanying a grading permit application shall include:

(1) a plan of the site on a sheet sized 24 inches by 36 inches at a scale of no smaller than one inch to 40 feet showing:

(i) legal name, address, and telephone number of the owner, developer, and applicant;

(ii) a time schedule indicating the anticipated starting and completion dates of the development sequence in accordance with the provisions of subsection (b)(1)(x), and the time of exposure of each area before the completion of

effective erosion and sediment control measures;

(iii) the estimated cost of grading, sediment controls, fill material, and site improvements;

(iv) the elevations, dimensions, location, extent, and slope of proposed grading, including building and driveway grades, utilities, sewer, water, storm drains, and, if applicable, the 100-year flood elevation, clearly indicated with finished contours at the same interval as required or used for existing topography;

(v) the estimate of the quantity of excavation and fill involved, to be verified by the Department;

(vi) complete storm drainage studies for the site, if not previously submitted in accordance with the provisions of Article 17 of this Code;

(vii) an appropriate legend;

(viii) a 100-foot adjacent peripheral strip, showing existing topography at a contour interval as follows:

1. where the site and its peripheral strip contain grades that average 3% or less, contours may not have more than a one foot interval;

2. where the site and its peripheral strip contain grades that average more than 3% but less than 16%, contours may not have more than a two foot interval; and

3. where the site and its peripheral strip contain grades that average 16% or more, contours may not have more than a five foot interval;

(ix) the supplemental reports and information that the Department acting in accordance with the recommendation of the Department of Public Works may require to insure the adequacy of the proposed plan;

(x) provision for erosion and sediment control measures throughout all phases of development, including:

1. phase I, clearing and grubbing;

2. phase II, rough grading and construction;

3. phase III, final grading and vegetative establishment;

4. phase IV, maintenance; and

5. proposed time schedule for each of the phases;

(2) a statement indicating that:

(i) the developer must request that the Department approve work completed in accordance with the approved erosion and sediment control plan, the grading or building permit, and this title;

(ii) on all sites with disturbed areas in excess of two acres approval of the Department shall be requested on completion of installation of perimeter erosion and sediment controls and before proceeding with any other earth disturbance or grading, and other building or grading inspection approvals may not be authorized until this initial approval by the Department is given; and

(iii) approval shall be requested on final stabilization of all sites with disturbed areas in excess of two acres before removal of controls;

(3) certification by the permittee that any clearing, grading, construction, development, or all of these, will be done pursuant to this plan and that responsible personnel involved in the construction project will have a certification of

training at a State Department of the Environment-approved training program for the control of sediment and erosion prior to beginning the project, except that the certification of training for responsible personnel requirement may be waived by the Department of Inspections and Permits on any project involving no more than four residential units;

(4) an identification of the responsible personnel with the certificate of training issued by the State Department of the Environment;

(5) details of temporary and permanent stabilization measures, including the following statement:

"Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within:

"A. seven calendar days as to the surface of all perimeter dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1); and

"B. fourteen days as to all other disturbed or graded areas on the project site.

"The above requirements do not apply to those areas which are shown on the plan and are currently being used for material storage or for those areas on which actual construction activities are currently being performed or to interior areas of a surface mine site where the stabilization material would contaminate the recoverable resource. Maintenance shall be performed as necessary to ensure that the stabilized areas continuously meet the appropriate requirements of the '1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control'";

(6) the sequence of construction, describing the relationship between the implementation and maintenance of controls, including permanent and temporary stabilization and the various stages or phrases of earth disturbance and construction and including, as a minimum, a schedule and time frame for the following activities: clearing and grubbing for those areas necessary for installation of perimeter controls; construction of perimeter controls; remaining clearing and grubbing; road grading; grading for the remainder of the site; utility installation and whether storm drain will be used or blocked after construction; final grading, landscaping, or stabilization; and removal of controls;

(7) additional information or data deemed appropriate by the Department and the Anne Arundel Soil Conservation District;

(8) the design professional's recommendations to guide the design, construction, and inspection of the proposed site and a record of the following factors on which the recommendations of the design professional were based:

(i) field observations;

(ii) field test data such as behavior of adjacent or nearby structures, geologic history and origin of soil, a field test boring log giving classification, standard penetration data, and water level observations, and field test results for pile load test, plate load test, and others as necessary;

(iii) laboratory test data such as moisture density curves, grain size curves, shear strength tests, moisture content, and consolidation test results; and

(iv) project characteristics such as those affecting soil and

foundation design, sensitivity to settlement and design loads, the factor of safety against failure, the consequences of failure and merits of programmed maintenance, and the location of borrow pits on the site or the location where suitable fill will be obtained.

(c) **Grading plans and specifications.** Grading plans and specifications shall set forth in detail the use and extent of fills in accordance with the following classification: type 1 fill; type 2 fill; and type 3 fill.

(d) **Guidelines.** The recommendations of a design professional to guide the design, construction, and inspection of the proposed site shall take into consideration the following:

(1) clearing, grubbing, keying, and undercutting for the acceptance of fill;

(2) compaction requirement for each class of fill;

(3) allowable slope angle and bench requirements for cut and fill slopes;

(4) erosion control during both the construction and the life of the facility;

(5) groundwater control during both the construction and the life of the facility;

(6) testing and inspection requirements of this title; and

(7) location, use, and restoration of borrow and spoil areas.

(e) **Waiver for filing certain information.** The Department may waive the filing of particular information whenever in its judgment the information will serve no useful purpose for the particular project and the waiver does not contravene the purposes of this title. In the case of an application for a grading permit for a borrow pit, sand pit, gravel pit, or quarry, it shall be necessary to furnish only those requirements considered necessary by the Department, the Anne Arundel Soil Conservation District, and where applicable, the State Department of Natural Resources or State Department of the Environment to prevent offsite damage and the sedimentation of natural stream or watercourses, and to provide adequate erosion and sediment control measures during and at the conclusion of applicants' activities.

(1985 Code, Art. 21, § 2-206) (Bill No. 49-88; Bill No. 90-89; Bill No. 13-90; Bill No. 71-94; Bill No. 105-01; Bill No. 23-04; Bill No. 3-05)

§ 16-2-207. Fee.

(a) **Generally.**

(1) Except as provided in subsection (a)(2), an applicant for a grading permit shall pay a fee for the permit that is established by the Department based on the estimated cost of grading, sediment and erosion controls, cut and fill material, and site improvements.

(2) The fee for a surface mining sediment control permit shall be:

(i) sufficient to cover the cost of reviewing plans and specifications and inspections necessary to ensure compliance with this title and attendant overhead costs, but not to exceed $2,000 for an operation of 49 acres or less or $3,500 for an operation of 50 acres or more;

(ii) collected annually; and

(iii) reviewed annually to ensure that the fee reflects the costs

of the permit's administration.

(b) **Grading permit fees.** Except as otherwise provided in this section, the fee to be paid to the Department for a grading permit is as follows:

Estimated Costs	
0 – $500	$40
$500.01 – $1,250	$80
$1,250 or over	$80 plus 4% of the estimated cost above $1,250

(c) **Site improvements covered by public works agreements.** Site improvements covered by a public works agreement are not included in grading and erosion control costs and fee calculations.

(d) **Grading permit for logging.** If the standard logging grading plan is used, the fee for a grading permit for logging is $25, regardless of costs.

(e) **Grading permit for single residential lot.** The fee for a grading permit for a single residential lot is $400 for a lot having an area of 20,000 square feet or less and $650 for a lot having an area of more than 20,000 square feet.

(f) **Grading permit authorizing additional work.** The fee for a grading permit authorizing additional work is the difference between the fee paid for the original permit and the fee required for the entire grading and sediment control project.

(g) **Adoption of unit prices.** The Director shall adopt unit prices to be used in determining estimated costs, taking into consideration the recommendations of the Building Code Violations Review Board and the Department of Public Works.

(h) **Refunds.** On request of the permittee, the Department may refund 50% of the permit fee if for any reason the permit is not issued or work under the permit is not commenced.

(1985 Code, Art. 21, § 2-208) (Bill No. 49-88; Bill No. 94-88; Bill No. 90-89; Bill No. 22-91; Bill No. 111-91; Bill No. 61-93; Bill No. 85-97; Bill No. 23-03; Bill No. 3-05; Bill No. 35-05)

§ 16-2-208. Security.

(a) **Definition.** In this section "local bank or other local accredited institution" means:

(1) a savings bank, State bank, or trust company regulated under the provisions of the Financial Institutions Article, of the State Code;

(2) a savings and loan association regulated under the provisions of the Financial Institutions Article, of the State Code; and

(3) a federal national bank, federal savings and loan institution, or other financial institution authorized to engage in the banking business in this State.

(b) **Security required prior to permit issuance.** A grading permit may not be issued for any grading unless the person applying for the permit files with the Department:

(1) a performance bond executed by the owner and a corporate surety authorized to do business in the State as a surety;

(2) a cash deposit, certified check, cashier's check, or an irrevocable letter of credit from a local bank or other local accredited institution; or

(3) if the person is a public utility franchised to operate in the County, a letter of guarantee in a form approved by the County Attorney.

(c) **Purpose of security.** The purpose of the security is to ensure that the site will be restored to a condition meeting the minimum requirements of this title whenever the work authorized by the permit is not satisfactorily completed within the time specified in this title, or whenever the work violates terms or conditions of the grading permit, approved plans, or this title.

(d) **Amount.** Security shall be in the amount of $200 plus $0.10 for each square foot of site area, plus the estimated cost of a storm drainage system proposed that is not covered by a public works agreement. The site area is the difference between the total site area and the area having an effective erosion-resistant ground cover or surface that will remain undisturbed.

(e) **Conditions.** Security required by this section shall be subject to the following conditions:

(1) the applicant shall comply with the provisions of this title and other applicable laws and regulations;

(2) the applicant shall comply with the terms and conditions of the grading permit and approved plans;

(3) the expiration date of the security shall exceed the expiration date of the grading permit or any extension by at least six months; and

(4) the security shall not be released until the site has been restored to a condition meeting the minimum requirements of this title.

(f) **Approval of security.** Before acceptance, a bond or irrevocable letter of credit shall be approved by the Director and in a form approved by the Controller and the County Attorney. The surety or local bank or other local accredited institution shall be approved by the Controller. A cash deposit, certified check, or cashier's check shall be deposited with the Director. The Director shall give a receipt for a cash deposit or check stating that the cash or check has been deposited in compliance with, and subject to, the provisions of this section.

(g) **Partial release of security.** The grading permit may provide for partial release of the security on the completion and acceptance of the various stages of development as specifically delineated, described, and scheduled on the plans. The provisions for partial release must be established before the issuance of the permit. Interim certificates of partial completion are required to authorize a partial release and a revised cost estimate must be submitted and accepted.

(h) **Forfeiture or payment of security.** Whenever the work authorized by a grading permit is not completed within the time specified in this title or violates terms or conditions of the grading permit, approved plans, or this title, any cash deposit, including a check, shall be forfeited, or if a bond or irrevocable letter of credit has been posted, payment in part or in full to the County shall be ordered. The funds received shall be used by the County to defray the cost of contracting, including engineering and administration, for the restoration of the site to meet the minimum requirements of this title and the approved plans with particular emphasis on stabilization, safety, drainage, and erosion control. Whenever the costs exceed the amount of the security, the excess shall be a lien on the property and the permittee shall be under a continuing obligation for payment of the excess costs incurred by the County. Whenever the costs do not exceed the County's

expenses, the portion of the money forfeited shall be returned.

(i) **Security effective until certificate of completion.** Security shall remain in effect until a certificate of completion has been issued by the Department certifying that the work has been performed in accordance with the plans and specifications or certifying that the grading permit has not been used. On issuance of a certificate of completion:

(1) if a default has not occurred, the entire security shall be released; or

(2) if a default has occurred, the entire security that has not been forfeited or paid to the County under subsection (h) shall be released.

(j) **Security for surface mining sediment control permits.** At the discretion of the Department, the provisions of this section may be satisfied for any portion of a surface mining sediment control permit if the applicant has provided the Maryland Department of Natural Resources with security in an amount no less than that required by this section as a condition for the issuance of a permit by the State for that portion.

(1985 Code, Art. 21, § 2-209) (Bill No. 49-88; Bill No. 90-89; Bill No. 13-90; Bill No. 22-91; Bill No. 71-94; Bill No. 49-03; Bill No. 3-05)

§ 16-2-209. Criteria for issuance.

(a) **Generally.** A grading permit shall be issued whenever:

(1) the proposed erosion and sediment control plan has been approved by the Anne Arundel Soil Conservation District;

(2) where applicable, plans have been submitted to and approved by the State Department of Natural Resources, the State Department of the Environment, the State Highway Administration, and the United States Army Corps of Engineers;

(3) the Office of Planning and Zoning has reviewed and approved the plans and specifications and the site development plan; and

(4) the plans and the site development plan and all required documentation conform to the requirements of this title and any other requirements of the Director.

(b) **Grading permits for work within 100-year floodplain.** Unless the grading is authorized by the State Water Resources Administration, the Department may not issue a grading permit for work that lies within the 100-year floodplain of a stream or watercourse.

(1985 Code, Art. 21, § 2-210) (Bill No. 94-88; Bill No. 90-89; Bill No. 13-90; Bill No. 71-94; Bill No. 3-05)

§ 16-2-210. Standards and Specifications.

(a) **Erosion and sediment control.** The Maryland Standards and Specifications for Soil Erosion and Sediment Control or any superseding document adopted by the State shall control erosion and sediment control principles, methods, and practices.

(b) **Grading permits and site improvements.** Design and construction criteria adopted by the Department of Public Works, including the Design Manual and the Standard Specifications and Standard Details for Construction, shall apply to all

grading permits and site improvements.
(1985 Code, Art. 21, § 2-210.1) (Bill No. 90-89; Bill No. 15-02)

§ 16-2-211. Conditions on issuance.

(a) **Imposition of conditions authorized.** The Department may impose conditions on the issuance of a grading permit that are necessary to prevent the creation of a nuisance or unreasonable hazard to persons or property including:

(1) the improvement of existing grading;

(2) the improvement of existing drainage to ensure adequate drainage patterns;

(3) the designation of easements for drainage facilities and maintenance of slopes or erosion control facilities;

(4) adequate control of dust by watering or other control methods acceptable to the Department;

(5) the demarcation of environmental buffer, setback areas, and limits of disturbance in a manner acceptable to and approved by the Department before commencement of clearing or grading; and

(6) the installation and maintenance of safety devices.

(b) **Listing of contractors and subcontractors.** On sites where more than two acres of land will be disturbed, before commencement of clearing or grading under a grading permit, a permittee shall provide to the Department a listing of all grading or site improvement contractors and subcontractors that will be performing work on the site. The listing shall include the legal name, address, and telephone number of each contractor and subcontractor and the name of a responsible individual supervising the work performed by the contractor or subcontractor. Each permittee shall certify that the permittee has reviewed the approved plan and all requirements with each contractor and subcontractor that is involved in grading or site improvements and advised those contractors and subcontractors to perform all work in accordance with the grading permit, approved plan, and this title.
(1985 Code, Art. 21, § 2-211) (Bill No. 90-89)

§ 16-2-212. Responsibilities of permittee.

A permittee is strictly responsible to ensure that all work on a site is properly undertaken in accordance with the grading permit, approved plan, stormwater management plan, and this Code. A permittee is responsible for all actions undertaken or omitted by employees, agents, contractors, and subcontractors on a site subject to a grading permit and approved plans. The employment of independent contractors does not result in an avoidance or delegation of these responsibilities.
(1985 Code, Art. 21, § 2-211.1) (Bill No. 90-89; Bill No. 3-05)

§ 16-2-213. Conformity to plans.

Work on a site shall be undertaken only in accordance with the grading permit and approved plan.
(1985 Code, Art. 21, § 2-212) (Bill No. 90-89)

§ 16-2-214. Suspension.

When the Anne Arundel Soil Conservation District suspends its approval of a plan under this title, the grading permit and plan shall be automatically suspended. (1985 Code, Art. 21, § 2-213) (Bill No. 90-89)

§ 16-2-215. Modification of plans and site development plan.

(a) **Department authorized to require revisions.** If the Department finds that an approved plan, site development plan, or stormwater management plan is not adequate to effect compliance with the law because of design errors, unanticipated site conditions, failure to follow the approved phasing, or other conditions, the Department may require revisions in the plan.

(b) **Submission of major modifications.** Major modifications of the approved plans or site development plan shall be submitted to the Department and reprocessed as an initial application for a grading permit.

(c) **Field changes for minor modifications.** The Anne Arundel Soil Conservation District shall develop a list of minor modifications of the approved grading plans that may be approved as field changes by the Department. The Department may approve field changes as provided in this section, if written authorization with justification is given to the responsible personnel; the Office of Planning and Zoning; and the Anne Arundel Soil Conservation District.

(d) **Approved modifications listed on grading plans.** The approved modifications shall be noted and dated on the grading plans.
(1985 Code, Art. 21, § 2-214) (Bill No. 90-89; Bill No. 3-05)

§ 16-2-216. Expiration and renewal.

(a) **Expiration of grading permit if work not commenced; one-time renewal.** A grading permit expires if no work is commenced within one year after issuance. A renewal is permitted one time within a period of six months after the date of expiration if the conditions under which the permit was originally issued have remained unchanged, except that the construction phase time schedule must be revised. A permit may not be renewed more than one time. A fee of $25 shall be paid to the County for the renewal.

(b) **Expiration of grading permit after commencement of work.** A grading permit on which work has been commenced expires three years after the date of issuance.

(c) **Request for extension of grading permit.** A permittee who is unable to complete the work within the time specified in the approved grading permit shall present a written request for an extension to the Department within 30 days before the expiration of the permit. The request shall specify the reason the extension is requested. Where, in the sole discretion of the Department, such an extension is warranted, it may grant such additional time as may be necessary and require revised plans.

(d) **Expiration of surface mining sediment control permit.** A surface mining sediment control permit shall expire at the same time that a surface mining permit issued by the State expires.
(1985 Code, Art. 21, § 2-215) (Bill No. 90-89; Bill No. 22-91)

§ 16-2-217. Transfer.

A grading permit may be transferred from one permittee to another permittee on written application and with the approval of the Director.
(1985 Code, Art. 21, § 2-215.1) (Bill No. 90-89)

SUBTITLE 3. BASIC DESIGN REQUIREMENTS

§ 16-2-301. Erosion and sediment control.

(a) **Applicability.** Grading shall comply with the provisions of this section.

(b) **Minimization of erosion potential.** Development shall be fitted to the topography and soils so as to create the least erosion potential.

(c) **Retention of natural vegetation.** Natural vegetation shall be retained and protected wherever possible.

(d) **Shoreline stabilization.** Natural vegetation and nonstructural methods shall be employed to the extent possible, for shoreline stabilization and erosion control in place of structural methods wherever possible.

(e) **Minimizing exposed areas.** Only the smallest practical area shall be exposed and then only for the shortest practical period of time.

(f) **Erosion control practices.** Erosion control practices such as interceptor ditches, berms, terraces, contour ripping, soil erosion checks, and sediment basins shall be installed to minimize soil and water losses.

(g) **Temporary vegetation or mulching.** Temporary vegetation or mulching shall be used to protect areas exposed during the time of development.

(h) **Stormwater management.** During and after development, stormwater management provisions shall be utilized to effectively accommodate increased runoff caused by changes in soil and surface conditions, and to avoid siltation of receiving streams.

(i) **Installation of permanent vegetation and structures.** Permanent vegetation and structures shall be installed in the development as soon as the weather permits.
(1985 Code, Art. 21, § 2-301) (Bill No. 49-88; Bill No. 90-89; Bill No. 61-93; Bill No. 56-95; Bill No. 104-97; Bill No. 20-00; Bill No. 12-00; Bill No. 44-00; Bill No. 49-03; Bill No. 23-04; Bill No. 3-05)

§ 16-2-302. Slopes of 15% or greater.

(a) **Grading permitted.** Grading within slopes of 15% or greater is permitted subject to the provisions of this section.

(b) **Extent of cutting and filling.** The extent of cutting and filling permitted on a lot shall be minimized based on the soil conditions at the site and in accordance with the recommendation of the Office of Planning and Zoning and the Anne Arundel Soil Conservation District. Construction on pilings or supports is permitted.

(c) **Construction of structures as condition precedent.** The construction of all structures shall be preceded by the installation of storm drainage systems and stabilization measures.

(d) **Single lot development where central storm drainage system does not exist.** In the case of a single lot development within an area where a central storm drainage system does not exist, runoff from driveways, roofs, and other improved surfaces shall be diverted and carried to an acceptable outlet to minimize scouring and prevent erosion by one or a combination of the following methods: filtration beds; subsurface dry wells; and storm drainage systems, underground conduit systems, or other adequate or protected outlets.
(1985 Code, Art. 21, § 2-302) (Bill No. 49-88; Bill No. 90-89; Bill No. 3-05; Bill No. 19-05)

§ 16-2-303. Structural erosion and sediment control measures.

(a) **Definitions.** In this section, "sediment basin" and "sediment trap" have the meaning stated in the Standards and Specifications.

(b) **Measures to be used.** Structural erosion and sediment control measures that shall be used include:

(1) diversions;

(2) bench terraces;

(3) outlet channels for the disposal of storm runoff from diversions, bench terraces, and other structures;

(4) waterway stabilization structures such as drop structures, grade stabilization structures, and channel liners;

(5) channel bank stabilization such as riprap, rock cribs, gabions, groins, jetties, and fencing and piling to provide a barrier that will withstand the erosive forces exerted by flowing water or to create a bank roughness that will reduce the erosive power by dissipating energy of the water as it moves along the bank line;

(6) stream channel improvement to straighten, realign, or construct a new channel to designed cross-section and grade as necessary;

(7) a sediment basin or sediment trap; and

(8) installation and maintenance of specified erosion and sediment control measures in accordance with the provisions of § 16-2-403.

(c) **Diversions.** The number, physical extent, and spacing of diversions shall be dependent on the land slope, soil, and runoff. Surface runoff shall be collected and conveyed laterally along the diversion at nonerosive and nonscouring velocities, and discharged into a protected area or outlet channel.

(d) **Bench terraces.** Bench terraces shall be applied along the contour with the length and width controlled by the natural terrain and the required erosion limitations.

(e) **Outlet channels.** The design of outlet channels for the disposal of storm runoff from diversions, bench terraces, and other structures shall be based on the runoff from predicted storm frequency and shall include the vegetative or structural measures required to protect the channel from scour and erosion.

(f) **Waterway stabilization structures.** Waterway stabilization structures such as drop structures, grade stabilization structures, and channel liners shall be utilized to dissipate the energy of flowing water by holding the waterway slopes and velocities within nonscouring limits.

(g) **Sediment basins and traps.**

(1) Sediment shall be removed mechanically when the sediment basin

behind the temporary barrier or the dam becomes filled, to an elevation shown on the plan or as required by the Department. The structure may be removed once stability is reached in the development area.

(2) A sediment basin located within a residential zoning classification shall be enclosed with a chain link type of fence enclosure so as to make it inaccessible from the outside to small children. The fence, including gates, shall be installed in an approved manner and may not be less than six feet above the ground. Gates shall be securely closed so that access can only be gained by authorized personnel. Other types of enclosures may be used only with the approval of the Building Official before installation. The enclosure shall be shown on the approved plans before issuance of the grading permit. A sediment basin located in an industrial or commercial zone may be required to meet the enclosure requirements of this subsection if the basin is located within 500 feet of a residential zone.

(3) A sediment trap may be required to be enclosed, in the discretion of the Department, when necessary to ensure public safety.

(h) **Cut and fill slopes.** Cut and fill slopes and other exposed areas shall be planted or otherwise protected from erosion before the release of the permit obligations. The responsibility shall remain with the permittee until the planting is well established in accordance with the provisions of § 16-2-403.

(i) **Fill.** Fill may not be deposited beyond the mean high-water line unless the fill is used for marsh creation or beach restoration and does not extend beyond the mean low-water line or the fill is placed behind a structural shoreline erosion control device constructed in accordance with Article 17 of this Code.

(1985 Code, Art. 21, § 2-304) (Bill No. 49-88; Bill No. 90-89; Bill No. 23-04; Bill No. 4-05)

§ 16-2-304. Sensitive area criteria.

(a) **Application of criteria.** Except as provided in subsection (b), the plan for a site is subject to sensitive area criteria whenever the land-disturbing activity on the site:

(1) is within a sensitive area;

(2) is within 300 feet of a sensitive area and is within the same drainage area as the sensitive area;

(3) drains into a storm drainage system that is improved with closed conduit or channels lined with material other than vegetation and that discharges into a sensitive area; or

(4) drains into a storm drainage system that is improved with closed conduit or channels lined with material other than vegetation and that discharges within 300 feet of a sensitive area and is within the same drainage area as the sensitive area.

(b) **Exemption.** A plan is exempt from the sensitive area criteria, including the sensitive area study, if not more than 5,000 square feet will be disturbed during development.

(c) **Slopes with a grade of 25% or more.** On a slope with a grade of 25% or more, grading may not occur on the slope or within 25 feet of the top of the slope.

(d) **Plan requirements.** In addition to other provisions of this Code, a plan for a site subject to sensitive area criteria shall be prepared so that:

(1) a sediment basin is a first priority and shall be used to the fullest

possible extent;

(2) a sediment trap shall be designed in accordance with the length-to-width ratio required for sediment basins;

(3) a stone outlet sediment trap may not be used;

(4) an additional sediment trap shall be used at each storm drain outfall unless outfall conditions are such that the construction of the sediment trap will cause an adverse impact on the outfall as determined by the Anne Arundel Soil Conservation District and the Department;

(5) sediment basins and sediment traps shall be properly maintained until the disturbed areas draining to them have been stabilized with a nonerosive ground cover;

(6) slopes of 15% or greater are not disturbed unless the developer demonstrates that the disturbance improves an existing erosion condition or is the only reasonable alternative in development of the site; and

(7) straw bale dikes and silt fences may be used only:

(i) in an area that does not drain into a sediment basin or sediment trap;

(ii) on a slope not exceeding a 25% grade;

(iii) if the maximum drainage area is limited to 0.25 AC/100 (100-foot surface distance); or

(iv) if the permittee stabilizes the area within 72 hours after completion of grading work in the area draining into the straw bales.

(e) **Alternative methods.** If the Department and the Anne Arundel Soil Conservation District determine following a review that the requirements of subsection (d) are not feasible, alternative methods may be submitted for review.

(f) **Submission of outfall survey.** The permittee of a site that is subject to sensitive area criteria shall submit an outfall survey with the plan for the purpose of comparing pre-construction conditions with post-construction conditions. The items to be included in the survey shall be determined by the Anne Arundel Soil Conservation District and the Department based on a field investigation of the site conducted in the preliminary design phase and may include the following:

(1) a topographical survey that has been made within the last 12 months including a survey of soundings or other appropriate survey;

(2) a description of existing vegetation;

(3) photographic or video documentation;

(4) a soil study 500 to 700 feet downstream from the outfall or at other locations required by the Department and the Anne Arundel Soil Conservation District;

(5) the boundary of any bog protection area; and

(6) a copy of any bog protection plan.

(g) **Installation of monitoring device.** In accordance with the outfall survey, the permittee may be required to install a monitoring device on the site to record changes in elevations.

(h) **Demarcation of buffers or setback areas.** In a sensitive area, each area that serves as a buffer or setback area shall be demarcated onsite in a manner acceptable to and approved by the Department before commencement of any grading.

(i) **Repair or restoration of site.** Erosion, sediment deposition, or

disturbance of a vegetative cover that occurs on or adjacent to the site of a sensitive area as a result of development on the site shall be repaired and restored before work may proceed.

(j) **Survey, repair, and restoration may be required.** At any time during or at the conclusion of operations under a grading permit, the Department may require the permittee to conduct an outfall survey and repair and restore any erosion or sediment deposition that has occurred.

(k) **Sensitive areas within critical areas.** Any development within a sensitive area that is also within the critical area shall comply with the requirements for both categories.

(1985 Code, Art. 21, § 2-305) (Bill No. 49-88; Bill No. 90-89; Bill No. 105-01; Bill No. 23-04; Bill No. 19-05)

§ 16-2-305. Fill – Load-bearing fills.

(a) **Applicability.** All fills shall be used in accordance with the provisions of this section.

(b) **Prohibited fill.** Ice, snow, and organic or other materials that may be subject to decay are prohibited.

(c) **Rock or broken concrete.** Rock or broken concrete free of any other materials with a dimension greater than eight inches may be placed in fills only if the specifications for placement are prepared by a professional engineer and the construction of the fill is carried out under the direction and supervision of a professional engineer in accordance with standard engineering practices. Rock and broken concrete may not be buried or placed in any load-bearing fill at an elevation higher than two feet below finished grade or below foundation base.

(d) **Fly ash.** Fly ash may be placed in fills only under the direction and supervision of a professional engineer in accordance with standard engineering practices.

(1985 Code, Art. 21, § 2-306) (Bill No. 90-89; Bill No. 23-04)

§ 16-2-306. Fill – Preparation of ground.

(a) **Placement on natural ground surface.** Fill may be placed on a natural ground surface only after organic surface materials, noncomplying fill, and unsuitable soils have been removed in accordance with the provisions of subsections (b) and (c). The fill may be placed if otherwise approved by the Department based on the recommendations of the professional engineer.

(b) **Compaction of surface.** Before placing type 1 and type 2 fills, the surface of the ground within five feet of the finished grade or foundation base elevation shall be compacted to achieve within the top six inches a density of not less than 90% of maximum density as provided in § 16-2-307.

(c) **Frozen ground.** Fill may not be placed on frozen ground.

(1985 Code, Art. 21, § 2-307) (Bill No. 23-04)

§ 16-2-307. Fill – Compaction.

(a) **Generally.** Fill shall be compacted in accordance with the provisions of

this section.

(b) **Requirements for type 1 and type 2 fills.** Type 1 and type 2 fills shall be compacted to a minimum of 95% and 90%, respectively, of maximum density as determined in the laboratory by ASTM Test Method D1557-66T, also known as the Modified Proctor Test.

(c) **Requirements for type 3 fill.** Type 3 fill shall be compacted sufficiently so as to be stable and to prevent an erosion hazard.

(d) **Determination of density.** In-place or field density shall be determined by ASTM Test Method D1556-64T or American Society of Highway Officials equivalent tests or by an equivalent test approved by the Department of Public Works.

(e) **Horizontal layers.** Fill shall be placed in approximately horizontal layers, each layer having a loose thickness of not more than eight inches.

(f) **Deviations to be certified.** Any fill that deviates from the requirements of this section shall be certified by a professional engineer.

(1985 Code, Art. 21, § 2-308) (Bill No. 90-89)

§ 16-2-308. Maximum slope caused by fill or cut.

(a) **Generally.** A fill or cut may not cause a final exposed surface or final cut face more steep than two horizontal to one vertical, except that the Department may require that a fill or cut be constructed with an exposed surface or cut face with a grade less than two horizontal to one vertical, or it may require other measures that it considers necessary for stability, vegetative establishment and maintenance, and safety.

(b) **Slopes steeper than three to one.** A fill that toes out on a natural slope at a grade more steep than three horizontal to one vertical may not be made unless approved by the Department on recommendation by the Anne Arundel Soil Conservation District.

(1985 Code, Art. 21, § 2-310) (Bill No. 90-89)

§ 16-2-309. Cut-and-fill slopes; bench terraces.

(a) **Cut-and-fill slopes.** Cut-and-fill slopes that are more than 30 feet but less than 40 feet in vertical height shall be terraced at approximately midheight. Terraces in slopes with a vertical height greater than 40 feet shall be made at equal vertical intervals not more than 20 feet apart, but whenever soil conditions adversely affect the stability, vegetative establishment, or maintenance of safety, the Department may require terraces at closer intervals.

(b) **Bench terraces.** Bench terraces shall be not less than five feet wide with a minimum invert gradient of 1% if seeded or 0.5% if paved. Bench terraces shall have a 10 to one lateral slope towards the toe of the upper bank, and shall convey water with not less than a six inch freeboard to an acceptable outlet.

(c) **Setbacks.** Cuts and fills shall be set back from property lines and buildings shall be set back from cut or fill slopes in accordance with the following diagrams:

(d) **Fill above slopes steeper than three to one.** Fill placed above the top of

an existing or proposed surface with a slope more steep than three horizontal to one vertical shall be set back from the top of the slope a minimum distance of 6 feet.

(e) **Increase of setbacks.** The setbacks established by this section may be increased by the Department whenever soil conditions adversely affect safety or stability or increase the possibility of damage from water, soil, or debris.

(f) **Reduction of setbacks.** The Department may reduce the required setback whenever the necessity for the setback may be eliminated or reduced by the construction of retaining walls or the owner has a letter of authorization to extend slopes onto the adjacent property.

(1985 Code, Art. 21, § 2-311) (Bill No. 23-04)

§ 16-2-310. Drainage.

(a) **Applicability.** Surface water runoff may be disposed of or conveyed in accordance with the provisions of this section.

(b) **Design standards.** Drainage facilities shall be designed to prevent erosion, uncontrolled overflow, and ponding when ponding is not an integral part of the design and function of the drainage facility. The water shall be conveyed to an acceptable outlet in accordance with the design criteria, standards, and procedures required by the Department of Public Works. The ponding of water is not permitted above a cut or fill slope or on a drainage terrace. Adequate drainage facilities shall be provided to prevent ponding above a cut or fill slope or on a drainage terrace.

(c) **Damage to face of cut or fill prohibited.** Surface water or groundwater may not damage the face of a cut or fill. Each slope shall be protected from surface water runoff by a berm, swale, or brow ditch. Suitable underdrains shall be installed to intercept and carry groundwater seepage to an acceptable outlet.

(d) **Positive drainage away from buildings.** Each area shall be graded to provide for positive drainage away from the building toward the approved disposal area.

(e) **Stormwater management.** Stormwater management shall be subject to the requirements and recommendations of the Anne Arundel Soil Conservation District, the State Department of the Environment, and the Department of Public Works. Measures such as infiltration beds, dry wells, and retention ponds may be used to allow stormwater runoff to percolate into the soil.

(1985 Code, Art. 21, § 2-312) (Bill No. 90-89)

§ 16-2-311. Combustion ash fill operations.

(a) **Applicability.** In addition to all other requirements of this title, the use of combustion ash in fill operations is subject to the provisions of this section.

(b) **Cover material requirements.** At least 18 inches of cover material, to include at least six inches of clay and at least 12 inches of topsoil, shall be placed when the site is up to design grade.

(c) **Groundwater monitoring wells.** Groundwater monitoring wells in the vicinity of the fill site shall be installed as required.

(d) **Compaction.** Ash shall be compacted immediately after spreading on the fill site.

(e) **Topsoil.** Topsoil shall be stripped from the fill site and used in final site

stabilization.

(f) **Area to be filled at one time.** An area to be filled at one time shall be kept to the smallest practicable size and shall be completely stabilized before moving the filling operation into the next area.

(g) **Limitations on use of combustion ash.** Combustion ash may not be used as a material in the construction of structural sediment and erosion control techniques such as sediment traps, temporary dams, swales, and basins unless used in the production of a suitable construction material such as cement, concrete, aggregate, manufactured riprap, or other material that may be employed in the construction of structural sediment and erosion control techniques.

(h) **Bottom ash and fly ash.** Bottom ash and fly ash may not be commingled. Bottom ash may not be used as a fill material and shall be used only for minor applications such as drainage blankets, french drains, and similar applications that are incidental to the overall fill operations.

(i) **Reports from testing groundwater monitoring wells.** The results derived from testing groundwater monitoring wells and for surface water quality shall be provided semiannually to the Department.

(j) **Final grade requirements.** The final grade of the site shall restore the site to a condition suitable for development of other uses permitted within the zoning district in which it is located, and minimize the impact on surrounding properties.

(k) **Applicability of other provisions.** Nothing in this section alters the applicability of other provisions of this subtitle to combustion ash fill sites.

(1985 Code, Art. 21, § 2-313) (Bill No. 90-89; Bill No. 60-94)

SUBTITLE 4. GRADING OPERATIONS

§ 16-2-401. Grading in floodplain.

A person may not perform grading on land that lies within the 100-year floodplain of a nontidal stream or watercourse unless the State Department of Natural Resources has authorized the grading and all necessary County permits have been obtained.

(1985 Code, Art. 21, § 2-401) (Bill No. 90-89)

§ 16-2-402. Removal of debris.

A person may not deposit debris or other material in a floodplain, habitat protection area, wetland, watercourse, public street, highway, sidewalk, or other public thoroughfare. Construction debris, building rubble, and clearing rubble shall be removed to an approved landfill.

(1985 Code, Art. 21, § 2-402) (Bill No. 49-88; Bill No. 90-89)

§ 16-2-403. Maintenance of protective measures.

The permittee shall conduct or provide for daily inspections and shall maintain continually in effective operational condition all grading surfaces, erosion control measures, vegetative covers, and other protective measures in accordance with approved plans and the Standards and Specifications until such times as they are removed with the

permission of the Department. Any measures that are disturbed or destroyed in the course of operations shall be immediately repaired.
(1985 Code, Art. 21, § 2-403) (Bill No. 90-89)

§ 16-2-404. Employment of permanent measures.

Whenever operations for which a grading permit has been issued cease for 90 consecutive days, temporary measures shall be replaced with permanent erosion and sediment control measures as specified in the "1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control."
(1985 Code, Art. 21, § 2-404) (Bill No. 90-89)

§ 16-2-405. Marking in the field.

Clearing limits and buffer areas shall be clearly flagged or marked in the field prior to any disturbance on a site. Any field changes shall be approved by the Office of Planning and Zoning before implementation.
(1985 Code, Art. 21, § 2-406) (Bill No. 49-88)

§ 16-2-406. Posting of permit.

A grading permit shall be posted at a readily visible location onsite before grading and clearing begins and shall remain posted until a certificate of completion is issued.
(1985 Code, Art. 21, § 2-407) (Bill No. 90-89)

SUBTITLE 5. INSPECTIONS

§ 16-2-501. Right of entry.

It is a condition of each grading permit that the Department has the right to enter periodically to inspect for compliance with the grading permit and this title. The right of entry remains in effect until all site work is completed and in compliance, and a certificate of completion is issued.
(1985 Code, Art. 21, § 2-501) (Bill No. 90-89)

§ 16-2-502. Pre-construction meeting.

At least 48 hours before commencing work under a grading permit and approved plans, a permittee shall notify the Department of the intended commencement. Work may not commence until the permittee or responsible personnel have met on the site with a representative of the Department to review the approved plans.
(1985 Code, Art. 21, § 2-502) (Bill No. 90-89)

§ 16-2-503. Inspections generally.

(a) **Applicability.** Active work onsite subject to a grading permit shall be performed in accordance with this section.

(b) **Onsite copy of approved plan.** The permittee shall maintain a copy of the approved plan onsite.

(c) **Inspection during stages of construction.** On all sites with disturbed areas in excess of two acres, the permittee shall request that the Department inspect work completed at the stages of construction specified in this subsection to ensure compliance with the approved plan, the grading or building permit, and this title:

(1) on completion of installation of perimeter erosion and sediment controls, before proceeding with any other earth disturbance or grading; and

(2) on final stabilization before removal of sediment controls.

(d) **Other building or grading inspections.** Other building or grading inspection approvals may not be authorized until initial approval by the Department under subsection (c)(1).

(e) **Inspections to average once every two week.** Every active site having an approved plan shall be inspected by the County for compliance with the plan on the average of once every two weeks.

(f) **Written report.** An inspector shall prepare a written report after each inspection.

(g) **Contents of inspection report.** The inspection report shall describe the date and location of the site inspection; whether or not the approved plan has been properly implemented and maintained; any practice deficiencies or erosion and sediment control plan deficiencies; and, if a violation exists, the type of enforcement taken.

(h) **Notification of violations in writing.** The Department shall notify the onsite personnel or the owner or developer in writing when violations are observed, describing the nature of the violation; the required corrective action; and the time period in which to have the violation corrected.

(1985 Code, Art. 21, § 2-503) (Bill No. 90-89)

§ 16-2-504. Inspections of areas subject to sensitive area criteria.

(a) **Applicability.** In addition to the provisions for inspection otherwise required by this title, a site that is subject to sensitive area criteria is subject to the inspections provided for in this section.

(b) **Pre-construction inspection.** Following approval of a grading permit but before its issuance, the Department and the Anne Arundel Soil Conservation District shall conduct a pre-construction inspection. The permittee, responsible personnel, each grading or site improvement contractor and subcontractor performing work on the site, and the design professional shall be present at the pre- construction inspection. The Department shall:

(1) issue the grading permit at the pre-construction inspection; and

(2) determine who will certify the phase I inspection under subsection (c).

(c) **Phase I inspection and certification of completion.** After completion of phase I as set forth on the approved plans, the design professional or personnel certified as responsible by the State Department of the Environment, as determined at the pre-construction inspection, shall conduct an inspection and certify satisfactory completion of phase I before commencement of work on phase II.

(1985 Code, Art. 21, § 2-504) (Bill No. 90-89; Bill No. 23-04)

§ 16-2-505. Supervision of inspections and tests.

(a) **Certification by professional engineer.** Whenever required by the Department, inspections and testing of a grading operation shall be performed under the direction of a professional engineer. The engineer shall certify the inspection reports and test results. The inspection reports shall include certification by the engineer of the adequacy of:

(1) cleared areas and benched or keyed surfaces prepared to receive fills;

(2) removal of unsuitable materials;

(3) construction of erosion and sediment control or drainage devices, buttress fills, underdrains, retaining walls, and other grading appurtenances;

(4) the degree of compaction where tests are performed; and

(5) construction of stormwater management devices.

(b) **Submission of reports and test results.** Certified inspection reports and certified test results shall be periodically submitted to the Department during the performance of the work or as otherwise required by the Department.
(1985 Code, Art. 21, § 2-505) (Bill No. 90-89)

§ 16-2-506. Records; as-built plans.

(a) **Permanent files on inspections.** The Department shall maintain permanent files on the inspections made by them under this title for four years after completion.

(b) **Information required for files.** On completion of work for which a grading permit was issued, the Department shall require the following for its files and shall also require copies for the Anne Arundel Soil Conservation District and the Department of Public Works:

(1) an as-built plan;

(2) certification by the permittee on the as-built plan that grading, drainage, structures, systems, and erosion and sediment control practices including facilities and vegetative measures have been completed in conformance with the approved plans and all required specifications; and

(3) a report summarizing the inspection reports, field and laboratory tests, and locations of tests and field observations.

(c) **Documentation of deviations.** Information required to show deviations from the approved plans on the as-built plan, and to support certificates such as measurements, rod readings, elevations, computations, and notes on field observations may be recorded by red-lining directly on the approved plan.

(d) **Submission of other plans or drawings.** Instead of as-built plans, the Department may permit the submission of other plans or drawings in such circumstances as the Director considers appropriate. The plans or drawings shall be prepared in accordance with criteria established by the Director.
(1985 Code, Art. 21, § 2-506) (Bill No. 90-89)

§ 16-2-507. Notification of completion.

The permittee or the permittee's agent shall notify the Department when the grading operation is ready for final inspection. Final approval shall be given in a timely manner only after all work and required vegetative stabilization, including installation of all drainage structures and erosion protective devices, have been completed and the required reports have been submitted.
(1985 Code, Art. 21, § 2-507) (Bill No. 90-89)

§ 16-2-508. Certificate of completion.

The Department shall issue a certificate of completion for a project for which a grading permit is required within 60 days after it receives a written notice of completion of the project, if after an inspection the Department finds that the permittee has complied with the provisions of this title.
(1985 Code, Art. 21, § 2-508)

SUBTITLE 6. ENFORCEMENT; PENALTIES

§ 16-2-601. In general.

(a) **Remedies independent.** The enforcement procedures set forth in this subtitle are independent remedies and may be utilized in any manner considered necessary by the Department.

(b) **Referral of violation to County Attorney or State's Attorney.** The Department may refer any violation of this title at any time to the County Attorney or the State's Attorney, as appropriate.

(c) **Removal of stop-work order.** A stop-work order posted under this subtitle may only be removed from a site by the Department.
(1985 Code, Art. 21, § 2-601) (Bill No. 90-89)

§ 16-2-602. Violation – Without permit.

(a) **Generally.** When there is a violation of this title on property where grading and clearing have been undertaken without the required grading permit or plan, the Department may:

(1) place a stop-work order on the property; and

(2) issue a correction notice to the owner of the property or other responsible party to bring the site into compliance.

(b) **Restoration of damaged areas.** The Department may require the owner of the property or other responsible party to completely restore all areas damaged as a result of the violation without causing additional damage to affected or adjacent areas.
(1985 Code, Art. 21, § 2-602) (Bill No. 90-89; Bill No. 12-00)

§ 16-2-603. Violation – With permit.

(a) **Generally.** When there is a violation of this title on property for which a grading permit has been issued, the Department may issue a notice of noncompliance to the permittee or other responsible party setting forth the nature of the required corrections

and the time for completing those corrections.

(b) **Failure to remedy from a notice of noncompliance.** If the permittee or other responsible party fails to act on a notice of noncompliance within the prescribed time, the Department shall post a stop-work order on the site. In the stop-work order, the Department may permit corrective work to proceed and set forth an additional time for completing the required corrections. The Department shall send a copy of the stop-work order by certified mail to the owner of the property and to the permittee or other responsible party.

(c) **Payment of security bond.** If the Department desires to obtain a bond posted as security under § 16-2-208, the Department shall send a copy of the stop-work order by certified mail to the surety.

(d) **Failure to remedy from a stop-work order.** If the corrections are not completed within the time set forth in the stop-work order:

(1) the permittee or other responsible party shall be considered in default of the conditions imposed by this title;

(2) any cash security, including a check, shall be forfeited; and

(3) the Department may order payment by any third party providing security.

(e) **Restoration of damaged areas.** The Department may require that the permittee or other responsible party restore all areas damaged as a result of the violation without causing additional damage to affected or adjacent areas.

(1985 Code, Art. 21, § 2-603) (Bill No. 90-89; Bill No. 12-00)

§ 16-2-604. Legal action.

(a) **Violations of title.** It is a violation of this title to use property in violation of this title; permit another person to use property in violation of this title; perform work for another person in violation of this title; or violate a correction notice, notice of noncompliance, or stop-work order issued pursuant to this title.

(b) **Referral of violation for legal action.** If at any time reasonable efforts to correct a violation are not undertaken by the permittee, owner of the property, or other violator, the Department may refer the violation for legal action.

(1985 Code, Art. 21, § 2-604) (Bill No. 90-89; Bill No. 59-00)

§ 16-2-605. Imminent harm.

(a) **Procedures upon threat of imminent or substantial harm.** Notwithstanding any other provision of this subtitle, if imminent and substantial harm to the stability of a site or the surrounding area is threatened as a result of a violation of the terms or conditions of a grading permit, approved plans, or this title, the County may, in the sole discretion of the Director, issue a stop-work order and authorize immediate entry to the property by County employees or agents to perform sufficient work at the site to eliminate public safety problems and to provide environmental stabilization and protection.

(b) **Procedures authorized as a condition of grading permit.** It is a condition of each grading permit that the Director or the Director's designees may enter the site to undertake work in accordance with subsection (a).

(c) **Compensation of costs.** To compensate the County for costs incurred under the provisions of this section, including administrative costs, security given by a permittee shall be forfeited or payment ordered in accordance with the provisions of § 16-2-208(h).

(d) **Costs in excess of security.**

(1) The cost of work performed under the provisions of this section in excess of that for which the County is compensated by security shall be an obligation of the owner of the property. The costs shall be levied and collected from the owner of the property in the same manner as County real property taxes and shall have the same priority rights, bear the same interest and penalties, and in every respect be treated as County real property taxes. The interest rate charged to the property owner shall be at the maximum legal rate.

(2) This subsection does not apply to a bona fide purchaser of a subdivided lot who had no financial interest in the development of the lot prior to acquiring legal title unless the violation is attributable to that purchaser.

(1985 Code, Art. 21, § 2-605) (Bill No. 90-89)

§ 16-2-606. Denial of permits.

The Department may deny the issuance of additional grading permits to an applicant if it determines that the applicant is not in compliance with the provisions of an approved plan, grading permit, or this title.

(1985 Code, Art. 21, § 2-606) (Bill No. 90-89)

§ 16-2-607. Civil enforcement.

The Director may enforce the provisions of this title through injunctive proceedings or any other appropriate proceedings. A court of competent jurisdiction may issue a temporary restraining order or interlocutory or final injunction, or other form of relief to restrain or correct violations of this title.

(1985 Code, Art. 21, § 2-607) (Bill No. 49-88; Bill No. 90-89; Bill No. 23-04; Bill No. 3-05)

§ 16-2-608. Civil fines.

A violation of any provision of this title is a civil offense, punishable by a civil fine as provided by § 9-2-101 of this Code and by the following:

(1) It is a Class A civil offense to perform any grading where the grading is performed in whole or in part in the critical area, where the unpermitted disturbance exceeds 5,000 square feet, and where the grading is performed without a permit required by this title or in excess of that approved by a permit;

(2) It is a Class B civil offense to perform any grading where the grading is performed in whole or in part in the critical area, where the unpermitted disturbance does not exceed 5,000 square feet, and where the grading is performed without a permit required by this title or in excess of that approved by a permit;

(3) It is a Class C civil offense to violate any other provision of this title; and

(4) For purposes of this section, "unpermitted disturbance" means the area of the disturbance performed without a required permit, or in excess of that approved by a permit, but the term does not include the area of disturbance for which no permit was required under this title.
(1985 Code, Art. 21, § 2-608) (Bill No. 90-89; Bill No. 12-00; Bill No. 59-00; Bill No. 23-04; Bill No. 37-04)

§ 16-2-609. Liability of permittee.

A permittee shall be strictly liable for violations of this title, whether the violations are committed by the permittee or by the permittee's employees, agents, contractors, or subcontractors.
(1985 Code, Art. 21, § 2-609) (Bill No. 90-89)
State Code reference – Article 25A, § 5(A).

TITLE 3. STORMWATER MANAGEMENT

Section

Subtitle 1. Definitions; General Provisions

Subtitle 2. Stormwater Management Plans, Minimum Control Requirements, and Stormwater Management Practices

Subtitle 3. Administrative Provisions

SUBTITLE 1. DEFINITIONS; GENERAL PROVISIONS

§ 16-3-101. Definitions.

In this title, the following words have the meanings indicated.

(1) "Administration" means the Maryland Department of the Environment Water Management Administration.

(2) "Adverse impact" means any deleterious effect on waters or wetlands, including their quality, quantity, surface area, species composition, aesthetics, or usefulness for human or natural uses that is or may be harmful or injurious to human health, welfare, safety, or property or to biological productivity, diversity, or stability or that unreasonably interferes with the enjoyment of life or property, including outdoor recreation.

(3) "Approving authority" means the Office of Planning and Zoning for a subdivision and the Department of Inspections and Permits for a grading permit.

(4) "Best management practice" means a structural stormwater management practice or nonstructural stormwater management practice designed to store temporarily or treat stormwater runoff in order to mitigate flooding, reduce pollution, and provide other amenities.

(5) "Channel protection storage volume (CP_V)" means the volume used to design structural stormwater management practices to control stream channel erosion, for which the method of calculation is specified in the 2000 Maryland Stormwater Design Manual, Volumes I and II (Maryland Department of the Environment, April 2000).

(6) "Clear" has the meaning stated in Article 17 of this Code.

(7) "County Procedures Manual" means the Anne Arundel County Stormwater Management Practices and Procedures Manual.

(8) "Critical area" has the meaning stated in Article 18 of this Code.

(9) "Department" means the Department of Inspections and Permits.

(10) "Design standards" means:

(i) the 2000 Maryland Stormwater Design Manual, Volumes I and II (Maryland Department of the Environment, April 2000);

(ii) USDA Natural Resources Conservation Service Maryland Conservation Practice Standard Pond Code 378 (January 2000); and

(iii) the County Procedures Manual.

(11) "Developer" means a person who undertakes development subject to this title.

(12) "Development" has the meaning stated in Article 17 of this Code.

(13) "Direct discharge" means the concentrated release of stormwater from development to tidal waters or vegetated tidal wetlands.

(14) "Director" means the Director of the Department of Inspections and Permits or the Director's designee.

(15) "Drainage area" means that area enclosed by a ridge line that contributes stormwater runoff to a single point measured in a horizontal plane.

(16) "Extended detention" means a stormwater management design feature that provides gradual release of a volume of water in order to increase settling of pollutants and protect downstream channels from storm events, for which the method of calculation is specified in the 2000 Maryland Stormwater Design Manual, Volumes I and II (Maryland Department of the Environment, April 2000).

(17) "Extreme flood volume (Q_f)" means the storage volume required to control infrequent, large storm events in which overbank flows reach or exceed the boundaries of the 100-year floodplain.

(18) "Flooding" means stormwater runoff from a natural or human-made stormwater runoff conveyance system that inundates an existing structure or that overflows onto land that lies outside of floodplain easements, drainage easements, or areas shown on federal insurance rate maps as flood-prone areas.

(19) "Grade" means to strip, scarify, excavate, or stockpile earth materials or to grub, fill, or otherwise move rootmat or topsoil.

(20) "Impervious surface" has the meaning stated in Article 18 of this Code.

(21) "Individual lot development" means development on an unimproved site for which subdivision approval is not required.

(22) "Infiltration" means the passage of water into the soil surface.

(23) "New development" means development on:

(i) an unimproved site where subdivision approval is required; or

(ii) a portion of a site on which there is an existing commercial, industrial, institutional, or multifamily residential use, if that portion of the site has not been part of the existing use.

(24) "Nonstructural stormwater management practice" means a stormwater management practice designed to minimize the use of structural stormwater management practices and the increase in stormwater runoff from development, including natural area conservation; disconnection of rooftop runoff; disconnection of non-rooftop runoff; sheet flow to buffers; grass channels; and environmentally sensitive development.

(25) "Outfall" means the point at which a proposed stormwater

conveyance system carrying stormwater runoff from a site discharges into an existing human-made or natural stormwater conveyance system.

(26) "Overbank flood protection volume (q_p)" means the volume controlled by structural stormwater management practices to prevent an increase in the frequency of out-of-bank flooding generated by development, for which the method of calculation is specified in the 2000 Maryland Stormwater Design Manual, Volumes I and II (Maryland Department of the Environment, April 2000).

(27) "Qualitative stormwater management" means a system of vegetative, structural, and nonstructural practices that reduce or eliminate pollutants that might otherwise be carried by stormwater runoff, including water quality volume and recharge volume design parameters.

(28) "Quantitative stormwater management" means a system of vegetative, structural, and nonstructural practices that control the increased volume and rate of stormwater runoff caused by development, including channel protection storage volume, overbank flood protection volume, and extreme flood volume design parameters.

(29) "Recharge volume (re_v)" means that portion of the water quality volume used to maintain groundwater recharge rates at a development site, for which the method of calculation is specified in the 2000 Maryland Stormwater Design Manual, Volumes I and II (Maryland Department of the Environment, April 2000).

(30) "Redevelopment" means development on:

(i) a site on which there is an existing commercial, industrial, institutional, or multifamily residential use, and the proposed use is not a single family residential use; or

(ii) a portion of a site on which there is an existing commercial, industrial, institutional, or multifamily residential use, and the proposed use is not a single family residential use, if that portion of the site has been part of the existing use.

(31) "Retrofit" means to construct a structural best management practice in a previously developed area; modify an existing structural best management practice; or implement a nonstructural stormwater management practice to improve water quality over current conditions.

(32) "Sediment" means soils or other surficial materials transported or deposited by the action of wind, water, ice, or gravity as a product of erosion.

(33) "Site" means a tract, lot, or parcel of land or a combination of tracts, lots, or parcels of land that are in one ownership or contiguous and in diverse ownership if development is to be performed as part of a unit, subdivision, or project.

(34) "Site tributary" means the watercourse that conveys the drainage from a site and the outfall.

(35) "Stormwater management plan" means a set of drawings, reports, and other documents, submitted by a developer as a prerequisite to obtaining stormwater management approval, that contain all of the information and specifications required by this title and the County Procedures Manual.

(36) "Structural stormwater management practice" means a stormwater management practice designed to satisfy the applicable minimum control requirements established in this title, including a stormwater management pond; stormwater management wetland; stormwater management infiltration; stormwater management filtering system; and stormwater management open channel system.

(37) "Tidal waters" means watercourses in which velocity, depth, and width are influenced by tidal action.

(38) "Tributary outfall" means the point, downstream of an outfall, at which the site tributary is joined by another tributary whose drainage area equals or exceeds the drainage area of the site tributary.

(39) "Waiver" means the relinquishment of stormwater management requirements by the approving authority for a specific development.

(40) "Watercourse" means any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine, or wash, in and including any adjacent area that is subject to inundation from overflow or floodwater.

(41) "Watershed" means the total drainage area contributing stormwater runoff to a single point.

(42) "Water quality volume (WQ_V)" means the volume needed to capture and treat the stormwater runoff from 90% of the average annual rainfall at a development site, for which the method of calculation is specified in the 2000 Maryland Stormwater Design Manual, Volumes I and II (Maryland Department of the Environment, April 2000).

(1985 Code, Art. 21, § 3-101) (Bill No. 53-01; Bill No. 1-02; Bill No. 65-03; Bill No. 3-05; Bill No. 4-05)

§ 16-3-102. Purpose.

The purpose of stormwater management in the County is to protect, maintain, promote, and enhance the public health, safety, and general welfare through the management of stormwater; protect public and private property from damage; reduce the adverse effects of development; reduce the effects of land use changes on stream channel erosion; preserve and enhance the environmental quality of streams and stream valleys; minimize adverse impacts on water quality and conserve plant, fish, and wildlife habitat; reduce flooding; maintain after development, as nearly as possible, the predevelopment stormwater runoff characteristics; and establish the minimum requirements and procedures to control the adverse impacts associated with increased stormwater runoff.

(1985 Code, Art. 21, § 3-102) (Bill No. 53-01)

§ 16-3-103. Scope.

(a) **Generally.** Pursuant to the Environment Article, Title 4, Subtitle 2, of the State Code, this title applies to all development within the County, sets forth minimum stormwater management requirements, and does not limit or repeal any other requirements of State law or County law.

(b) **Applicability to developers.** A developer shall provide stormwater management practices in accordance with this title if the developer:

(1) applies for subdivision approval or for an original grading permit on or after July 1, 2001;

(2) applies for subdivision approval before July 1, 2001, but approval is not given before July 1, 2002;

(3) applies for subdivision approval before July 1, 2001, approval is given before July 1, 2002, but the original grading permit is not issued before December

15, 2002; or

(4) applies for an original grading permit, not within a subdivision, before July 1, 2001, but the permit is not issued before July 1, 2002.

(c) **Inapplicability of current provisions to developers.** A developer shall provide stormwater management practices in accordance with Title 3 as it existed prior to the enactment of Bill No. 53-01 if the developer:

(1) applies for subdivision approval before July 1, 2001, subdivision approval is given before July 1, 2002, and the original grading permit is issued before December 15, 2002; or

(2) applies for an original grading permit, not within a subdivision, before July 1, 2001, and the grading permit is issued before July 1, 2002.

(d) **Exception to inapplicability of current provisions to developers.** Notwithstanding the provisions of subsection (c), a developer shall provide stormwater management practices in accordance with this title if the developer is issued a grading permit under subsection (c) and the grading permit expires in accordance with § 16-2-216; construction is not active and ongoing, as determined by the Department; or construction of the stormwater management practice is not completed by July 1, 2004.
(1985 Code, Art. 21, § 3-103) (Bill No. 53-01; Bill No. 1-02)

§ 16-3-104. Administration and enforcement.

The Department of Inspections and Permits and the Office of Planning and Zoning shall administer and enforce this title.
(1985 Code, Art. 21, § 3-104) (Bill No. 53-01)

§ 16-3-105. County Procedures Manual.

(a) **Preparation.** The Director shall prepare and regularly update the County Procedures Manual for Stormwater Management Design, Construction, and Maintenance in furtherance of the provisions of this title.

(b) **Adoption and amendment.** The Director shall adopt and make changes to the County Procedures Manual following review, comment, and approval by the administration and review and comment by the Anne Arundel Soil Conservation District, the Department of Public Works, and the Office of Planning and Zoning.

(c) **Written interpretations.** The Director may issue written interpretations to clarify the requirements of the County Procedures Manual.
(1985 Code, Art. 21, § 3-105) (Bill No. 53-01)

§ 16-3-106. Design standards.

(a) **Documents adopted.** The following documents are adopted as establishing requirements for stormwater management principles, methods, and practices in this County:

(1) the 2000 Maryland Stormwater Design Manual Volumes I and II (Maryland Department of the Environment, April 2000); and

(2) USDA Natural Resources Conservation Service Maryland Conservation Practice Standard Pond Code 378 (January 2000).

(b) **County Procedures Manual.** The County Procedures Manual is adopted as establishing additional County specific design requirements; special watershed requirements and management plans; and procedures and documentation requirements for plan submission, maintenance, and inspection.

(c) **Compliance with title and design standards required; conflicting standards.** Each developer required to submit a stormwater management plan and provide stormwater management shall comply with this title and the design standards. In the event of a conflict among the design standards, the more restrictive provision shall govern.

(1985 Code, Art. 21, § 3-106) (Bill No. 53-01)

§ 16-3-107. Revolving fund.

(a) **Establishment.** There is a revolving fund to support the cost of repairs or reconstruction of private stormwater management practices by the County.

(b) **Expenditures.** The Controller may allow an expenditure of up to $100,000 for each fiscal year from the general County capital projects funds on a revolving fund basis to support the cost of repairs or reconstruction undertaken by the County.

(c) **Additional payments into fund.** The County Council may authorize additional revenues to be paid into this fund.

(d) **Recovery of costs.** The County may recoup the cost of repairs or reconstruction plus interest at the maximum legal rate from the property owner or other responsible party.

(1985 Code, Art. 21, § 3-107) (Bill No. 53-01)

SUBTITLE 2. STORMWATER MANAGEMENT PLANS, MINIMUM CONTROL REQUIREMENTS, AND STORMWATER MANAGEMENT PRACTICES

§ 16-3-201. Stormwater management plans required.

Except as provided in § 16-3-202, before a developer undertakes any development in the County, a stormwater management plan or an application for waiver shall be submitted for review and approval to the Office of Planning and Zoning for subdivision and to the Department of Inspections and Permits for a grading permit.

(1985 Code, Art. 21, § 3-201) (Bill No. 53-01)

§ 16-3-202. Exceptions to stormwater management plan requirement.

(a) **Definition.** In this section, "agricultural land management practices" means those methods and procedures used in the cultivation of land that further crop and livestock production and conservation of related soil and water resources and "agricultural land management practices" includes best management practices.

(b) **Exempt developments.** Except in the critical area, the following types of development are exempt from the provisions of this title and the requirements of

providing a stormwater management plan:

(1) agricultural land management practices that are undertaken in accordance with an active soil conservation and water quality plan that has been reviewed and approved by the Anne Arundel Soil Conservation District;

(2) a commercial, industrial, or institutional development that does not disturb over 5,000 square feet of land area and that has not previously been given an exemption from stormwater management under this provision;

(3) a residential development that does not disturb over 5,000 square feet of land area; and

(4) development regulated under State law that provides for managing stormwater runoff.

(1985 Code, Art. 21, § 3-202) (Bill No. 53-01)

§ 16-3-203. Contents of stormwater management plan.

(a) **Consistent with design standards.** The stormwater management practices shown on the stormwater management plan shall be consistent with the design standards and constructed according to an approved stormwater management plan.

(b) **Compliance with regulations; supporting documentation.** A stormwater management plan shall comply with this title and the design standards and shall contain supporting computations, drawings, and sufficient information, as required in the County Procedures Manual, describing the manner, location, and type of practices by which stormwater runoff from the development will be managed.

(c) **Preparation.** A stormwater management plan shall be prepared by:

(1) a professional engineer, professional land surveyor, or landscape architect licensed in the State, as permitted by the State Code for the type of stormwater management plan required; or

(2) if a best management practice requires a dam safety permit from the administration or a small pond approval from the Anne Arundel Soil Conservation District, a professional engineer licensed in the State.

(d) **Easements, right-to-discharge, and other property interests.** If a stormwater management plan involves direction of some or all of the stormwater runoff from the site in a manner that alters the flow characteristics of depth, velocity, width, or rate, a developer shall obtain from abutting property owners any necessary easement, right-to-discharge, or other property interest concerning flow of water. This shall not relieve the developer from obtaining any necessary easement, right-to-discharge, or other property interest concerning flow of water from adjacent property owners.

(e) **Maintenance schedule.** A developer shall prepare and print on the approved stormwater management plan a maintenance schedule for the life of any stormwater management practice. The maintenance schedule shall state the maintenance to be completed, the time period for completion, and who shall perform the maintenance and be recorded among the land records of the County.

(f) **Review; notice of approval or rejection.** The approving authority shall review the stormwater management plan to determine whether the plan meets the requirements of this title and give notification of approval or reasons for disapproval or modification to the developer in accordance with this title, the design standards, and Article 17 of this Code.

(g) **Approvals required.** A stormwater management plan shall not be considered approved without written approval from:

(1) the approving authority;

(2) the Maryland Dam Safety Administration if the stormwater management plan includes stormwater management practices that require dam safety approval; and

(3) the Anne Arundel Soil Conservation District if the stormwater management plan includes stormwater management practices that require small pond approval.

(h) **Consistency with watershed management studies or flood management plans.** If applicable, stormwater management plans shall be consistent with adopted and approved watershed management studies or flood management plans as approved by the administration in accordance with the Flood Hazard Management Act of 1976.

(1985 Code, Art. 21, § 3-203) (Bill No. 53-01; Bill No. 3-05)

§ 16-3-204. Minimum control requirements – In general.

(a) **Preparation in accordance with design standards.** Stormwater management plans shall be prepared in accordance with the design standards. Subject to the approval of the approving authority and the administration, a developer shall use basic design criteria, methodologies, and construction specifications as set forth in the design standards.

(b) **Individual lots disturbing less than 15,000 square feet.** For all individual lot development that disturbs less than 15,000 square feet, the minimum control requirements are: recharge volume (RE_V); water quality volume (WQ_V); and channel protection volume (CP_V), unless the development has a direct discharge.

(c) **New development and individual lots disturbing more than 15,000 square feet.** For all new development and individual lot development that disturbs at least 15,000 square feet, the minimum control requirements are:

(1) recharge volume (RE_V);

(2) water quality volume (WQ_V);

(3) channel protection volume (CP_V) unless the development has a direct discharge;

(4) overbank flood protection volume (Q_p) unless:

(i) the development has a direct discharge;

(ii) the developer demonstrates to the approving authority, through an analysis in conformance with § 16-3-208(f), that an unmanaged 10-year storm event for the proposed development will not cause erosion, flooding, or any other adverse impact on the receiving waters or downstream stormwater conveyance system; and

(5) extreme flood volume (Q_f) if there is evidence of flooding downstream of the development to the limits established in § 16-3-208(f).

(d) **Redevelopment.** For all redevelopment, the minimum control requirements are recharge volume (RE_V), to the maximum extent practicable, and:

(1) reduction of the existing onsite impervious surface areas by at least

20%;

(2) if site conditions prevent the 20% reduction of existing onsite impervious surface area, implementation of a combination of impervious surface area reduction and qualitative stormwater management practices, so that the untreated portion of the post-construction onsite impervious surface area equals no more than 80% of the pre-construction onsite impervious surface area; or

(3) if site conditions prevent any reduction of impervious surface area or implementation of onsite qualitative stormwater management practices then practical alternatives, in the same watershed, may be considered, including implementation of offsite best management practices for a drainage area comparable in size and percentage of impervious surface area to that of the development; analysis, design, and construction of watershed or stream restoration; retrofitting of existing stormwater management practices to accommodate the stormwater management requirements of this title; or inclusion of other stormwater management practices as approved, on a case-by-case basis, by the approving authority.

(1985 Code, Art. 21, § 3-204) (Bill No. 53-01; Bill No. 1-02)

§ 16-3-205. Minimum control requirements – Critical area.

(a) **Stormwater management requirements.** In addition to the other requirements of this subtitle, for development on a site within the critical area, stormwater management shall be provided in accordance with this section, to the extent that it is more restrictive.

(b) **Intensely developed areas.** For intensely developed areas in the critical area, water quality shall be improved as follows:

(1) for development sites on which disturbance is less than 5,000 square feet and for which no grading permit is required, mitigation for new impervious surface shall be:

(i) for disturbance of less than 1,000 square feet within the 100-foot critical area buffer, mitigation shall be subject to approval by the Office of Planning and Zoning, according to the following priority order:

1. replanting inside the 100-foot critical area buffer of an area two times the area of new impervious surface;

2. replanting outside the 100-foot critical area buffer of an area two times the area of new impervious surface; or

3. payment of a fee in the amount of $1.20 per square foot of new impervious surface;

(ii) for disturbance of less than 1,000 square feet outside the 100-foot critical area buffer:

1. replanting onsite within the critical area of an area equal to the area of new impervious surface; or

2. payment of a fee in the amount of $0.60 per square foot of new impervious surface;

(iii) for disturbance of between 1,000 and 5,000 square feet within the 100-foot critical area buffer, mitigation shall be subject to approval by the Department of Planning and Zoning, according to the following priority order:

1. replanting within the 100-foot critical area buffer of

an area two times the amount of new impervious surface;

2. replanting outside the 100-foot critical area buffer of an area two times the area of new impervious surface;

3. replanting at an off-site location in the critical area of an area two times the area of new impervious surface; or

4. payment of a fee of $1.20 per square foot of new impervious surface; and

(iv) for disturbance of between 1,000 and 5,000 square feet outside the 100-foot critical area buffer, mitigation shall be subject to the approval of the Office of Planning and Zoning, according to the following priority order:

1. replanting onsite within the critical area of an area equal to the area of new impervious surface;

2. replanting offsite within the critical area of an area equal to new impervious surface; or

3. payment of a fee of $0.60 per square foot of new impervious surface;

(2) for development sites of more than 5,000 square feet or sites on which a grading permit is required, water quality shall be improved as follows:

(i) pollutant loadings from impervious surfaces shall be reduced by at least 10%;

(ii) development shall have pollutant-loading reduced by at least 10% below the level of pollution from the site prior to development; and

(iii) development shall be undertaken in accordance with the current Critical Area Commission Guidance Document for evaluating compliance with the 10% rule in the critical area, except that, if it is impractical to use the technical report, alternative methods to achieve a 10% reduction may be used;

(3) all computations and data necessary to ensure that development meets the 10% pollutant reduction requirement shall be provided by the developer to the approving authority for approval; and

(4) offsets permitted by the design standards and the technical report may be used either onsite or offsite in the same critical area watershed to reach the 10% pollutant reduction requirement of this subsection.

(c) **Fees paid in lieu.** Fees paid in lieu of replanting under this section shall be maintained in a separate fund to be used by the County for projects that improve water quality within the same watershed as the property for which the fees were collected.
(1985 Code, Art. 21, § 3-205) (Bill No. 53-01; Bill No. 49-03)

§ 16-3-206. Minimum control requirements – Jabez Branch.

The County shall prepare a watershed management study in accordance with § 16-3-302(a) to address the protection of the Jabez Branch, a stream system capable of supporting cold water fisheries.
(1985 Code, Art. 21, § 3-206) (Bill No. 53-01)

§ 16-3-207. Additional requirements.

The approving authority may require more than the minimum control

requirements specified in this subtitle if:

(1) hydrologic or topographic conditions warrant;

(2) flooding, stream channel erosion, or water quality problems exist between the outfall and the point of investigation downstream of the tributary outfall, as determined by the analysis required under § 16-3-208(f); or

(3) the County has completed a watershed management study, in accordance with § 16-3-302(a), that indicates additional requirements are necessary. (1985 Code, Art. 21, § 3-207) (Bill No. 53-01)

§ 16-3-208. Stormwater management practices.

(a) **Use in developing stormwater management plan.** Structural stormwater management practices and nonstructural stormwater management practices established in this title shall be used, either alone or in combination, in developing a stormwater management plan.

(b) **Design according to design standards.**

(1) The following structural stormwater management practices shall be designed according to the design standards to satisfy the applicable minimum control requirements established in §§ 16-3-204 through 16-3-207: stormwater management ponds; stormwater management wetlands; stormwater management infiltration; stormwater management filtering systems; and stormwater management open channel systems.

(2) When selecting structural stormwater management practices, a developer shall consider the performance criteria specified in the design standards with regard to general feasibility, conveyance, pretreatment, treatment, topography, environment and landscaping, and maintenance.

(3) A developer shall select structural stormwater management practices to accommodate the unique hydrologic or geologic regions of the County.

(c) **Nonstructural stormwater management practices.**

(1) A developer shall apply the following nonstructural stormwater management practices according to the design standards to minimize increases in stormwater runoff from new development and redevelopment: natural area conservation; disconnection of rooftop runoff; disconnection of non-rooftop runoff; sheet flow to buffers; grass channels; and environmentally sensitive development.

(2) A developer shall implement the use of nonstructural stormwater management practices to the maximum extent practicable for satisfying the recharge volume (RE_V) requirements prior to the use of structural stormwater management practices in order to mimic more closely the pre-development hydrology and to discourage reliance on structural best management practices.

(d) **Minimum control requirements.**

(1) The minimum control requirements set forth in §§ 16-3-204 through 16-3-207 may be reduced when nonstructural stormwater management practices are incorporated into a site design according to the design standards.

(2) The use of nonstructural stormwater management practices may not conflict with existing State or local laws, ordinances, regulations, or policies.

(3) Nonstructural stormwater management practices used to reduce the

minimum control requirements shall be recorded in a private stormwater management inspection and maintenance agreement and remain unaltered by current and subsequent property owners.

(4) Prior approval from the approving authority shall be obtained before nonstructural stormwater management practices are altered.

(e) **Alternative stormwater management practices.** Alternative structural stormwater management practices and nonstructural stormwater management practices that meet the performance criteria established in the design standards may be used for new development and individual lot development, if they are approved by the approving authority and the Administration, and for redevelopment, if they are approved by the approving authority.

(f) **Modification of minimum control requirements.**

(1) For the purpose of modifying the minimum control requirements, the developer shall submit to the approving authority an analysis of the impacts of stormwater flows downstream in the watershed.

(2) The analysis shall include hydrologic and hydraulic calculations necessary to determine the impact of hydrograph timing modifications of the proposed development on a dam, highway, structure, or natural point of restricted stream flow.

(3) The point of investigation shall be downstream of the tributary outfall and shall be established with the concurrence of the approving authority.
(1985 Code, Art. 21, § 3-208) (Bill No. 53-01; Bill No. 1-02; Bill No. 3-05)

SUBTITLE 3. ADMINISTRATIVE PROVISIONS

§ 16-3-301. Application; approval.

(a) **Subdivision applications.** The Office of Planning and Zoning may not approve a subdivision application unless:

(1) the application is exempt under § 16-3-202;

(2) a waiver is granted in accordance with § 16-3-302; or

(3) the developer submits and secures approval, for a sketch plan application, conceptual and schematic stormwater management plans for proposed onsite and offsite stormwater management or, for a final subdivision application, final stormwater management plans and designs for proposed onsite and offsite stormwater management.

(b) **Grading permits.** The Department may not issue a grading permit unless a developer:

(1) submits to the Department a recorded right-to-discharge from an adjacent property owner, as necessary; a recorded stormwater management inspection and maintenance agreement; and a security, in accordance with § 16-3-401;

(2) submits to and obtains approval from the Department for the stormwater management plans for the development, in accordance with the design standards, this title, and Title 2; or

(3) certifies that the site has been approved for compliance with this title; is exempt under § 16-3-202; has been granted a waiver in accordance with § 16-3-302; or has facilities to manage stormwater quantity and quality in compliance with this

title.

(c) **Imposition of conditions authorized.** In granting approval of a stormwater management plan, the approving authority may impose such conditions as it considers necessary to ensure compliance with the provisions of this title and the preservation of the public health and safety.

(d) **Written recommendations of Anne Arundel Soil Conservation District.** An approval granted by the approving authority under subsections (a)(3) and (b) shall be based on the written recommendation of the Anne Arundel Soil Conservation District.

(e) **Right of entry as a condition of permit.** It is a condition of each permit granted that officers and employees of the County or the administration may enter onto the site covered by the permit for the purpose of making inspection for compliance with the approved stormwater management plan and the provisions of this title.
(1985 Code, Art. 21, § 3-301) (Bill No. 53-01)

§ 16-3-302. Waiver – Quantitative stormwater management.

(a) **Generally.**

(1) Except in the intensely developed area of the critical area, the approving authority may grant a waiver to the quantitative stormwater management minimum control requirements, only for development in an area where watershed management studies conforming to this subsection have been developed by the County for the purpose of implementing different stormwater management policies.

(2) A watershed management study shall include detailed hydrologic and hydraulic analyses to determine hydrograph timing; evaluate both quantitative stormwater management and qualitative stormwater management; include cumulative impact assessment of watershed development; identify existing flooding and receiving stream channel conditions; be conducted at a reasonable scale; specify where quantitative stormwater management practices and qualitative stormwater management practices, both onsite and offsite, are to be implemented; be consistent with the general performance standards for stormwater management found in the design standards; and be approved by the administration.

(b) **Written requests for quantitative stormwater management or primary environmental features.** A developer seeking a waiver to quantitative stormwater management or to the primary environmental features requirement of the County Procedures Manual shall submit a written request to the approving authority that contains descriptions; drawings; specific justifications; any other information that is necessary for the approving authority to evaluate the proposed development; and the name and address of each person who owns property located within 175 feet of the boundaries of the site for which the waiver is requested.

(c) **Additional request for waiver upon additions, extensions, or modifications.** If there are subsequent additions, extensions, or modifications to a development once a waiver has been granted, a developer shall submit a separate written request for a waiver in accordance with the provisions of this section.

(d) **Consideration of waivers.** In granting a waiver, the approving authority shall consider each request on a case-by-case basis; consider the cumulative effects of the County's waiver policy; and reasonably ensure that the development will not have an

adverse impact on the downstream receiving watercourse.

(e) **Imposition of conditions authorized.** The approving authority may impose any conditions and requirements necessary to ensure compliance with the purpose and intent of this title.

(f) **Contents of waiver.** Each waiver granted shall be in writing; state the extent of the waiver granted; state the reasons for granting the waiver; and contain any conditions or requirements imposed by the approving authority.

(g) **Appeal.** A person aggrieved by the decision of the approving authority on a request for a waiver under this section may appeal the decision to the Board of Appeals. (1985 Code, Art. 21, § 3-302) (Bill No. 53-01)

§ 16-3-303. Waiver – Public meetings.

(a) **Public meeting required.** The approving authority shall hold a public meeting before granting a quantitative stormwater management waiver under § 16-3-302.

(b) **Information to be submitted prior to public meeting.** The following information shall be provided by the approving authority to the Office of Community and Constituent Services before the public meeting:

(1) a summary of the requirements of this title for which the waiver is requested;

(2) a description of the proposed development, and the subdivision name and number, if applicable;

(3) the councilmanic district;

(4) the general location and the nearest intersecting roadway;

(5) the type and number of units;

(6) the size of the tract;

(7) the location, time, and date of the public meeting; and

(8) the name and address of each person who owns property located within 175 feet of the boundaries of the site for which the waiver is requested.

(c) **Notice of request for a waiver.** At least 30 days before the public meeting, the Office of Community and Constituent Services shall send a notice of the request for a waiver:

(1) by mail or electronic or other means to each community association listed in the records of the Office of Community and Constituent Services that represents an area affected by the request for a waiver; and

(2) by first class mail to each person who owns property located within 175 feet of the boundaries of the site for which the waiver is requested.

(d) **Contents of notice.** The notice required by subsection (c) shall contain the information described in subsection (b) and the mailing and e-mail addresses and facsimile and telephone numbers of an individual in the Office of Planning and Zoning, or the Department, as applicable, from whom information about the request for a waiver may be obtained.

(e) **Posting of signs giving notice of waiver application.**

(1) At least 30 days before the public meeting, one or more signs shall be erected on the property to give notice of the application. Signs shall be furnished to the developer by the approving authority and shall be erected by the developer.

(2) The developer shall be responsible for the maintenance and

position of the signs on the property.

(3) Signs shall be erected no more than 10 feet from each boundary of the site that abuts a public road unless a distance of more than 10 feet is necessary to enhance the visibility of the sign because of the flora covering or topographic conditions of the site. If the site does not abut a public road, one or more signs shall be erected in locations that readily can be seen by the public.

(4) The bottom of each sign shall be at least three feet above the ground, and each sign shall be at least 2.5 feet in height and three feet in width; red and white in color with black lettering; and made of weather-resistant material.

(5) Each sign shall contain the following information:

(i) a summary of each of the requirements of this title for which the waiver is requested;

(ii) a description of the proposed development, and the subdivision name and number, if applicable;

(iii) the location, time, and date of the public meeting;

(iv) a statement that further information may be obtained by contacting the Office of Planning and Zoning or the Department, as applicable; and

(v) the telephone number and e-mail address of an individual in the Office of Planning and Zoning or the Department, as applicable, from whom information about the request for a waiver may be obtained.

(f) **Publication of notice in newspaper.** The approving authority shall place a notice of the public meeting required by this section in a newspaper of general circulation in that part of the County in which the site is located. The notice shall be published in the newspaper no later than 10 days before the public meeting and shall contain the following information:

(1) a summary of the requirements of this title for which the waiver is requested;

(2) a description of the proposed development, and the subdivision name and number, if applicable;

(3) the general location and the nearest intersecting roadway;

(4) the mailing and e-mail addresses and facsimile and telephone numbers of an individual in the Office of Planning and Zoning or the Department, as applicable, from whom information about the request for a waiver may be obtained; and

(5) the location, time, and date of the public meeting.

(g) **Responsibility for direct costs of notice requirements.** The person submitting the request for a waiver shall pay to the County in advance the direct costs of fulfilling the notice requirements set forth in subsections (c), (e), (f), and (j) as determined by the approving authority. These direct costs include the costs of stationery, postage, sign materials, and newspaper advertisement.

(h) **Rescheduled public meetings.** The notice requirements set forth in subsections (c), (e), and (f) shall apply to a rescheduled public meeting if the initially advertised public meeting is postponed. The person requesting the postponement shall pay in advance the direct costs of fulfilling the notice requirements for the rescheduled public meeting.

(i) **Informal meeting; testimony permitted.** The public meeting shall be informal in nature, and testimony in favor of and in opposition to the grant of a waiver

shall be allowed.

(j) **Notice of decision.**

(1) If a public meeting is held, the approving authority shall provide notice of a decision granting or denying a request for a waiver by mail or other suitable means determined by the approving authority to:

(i) each community association that represents an area affected by the request for a waiver;

(ii) each person who owns property located within 175 feet of the boundaries of the site for which the waiver was requested;

(iii) individuals who attend the public meeting who have placed their names on a list to be notified; and

(iv) other individuals who contact the approving authority to request notification.

(2) Notification under this subsection shall include advice of the right of a person aggrieved by the decision to appeal the decision to the Board of Appeals in accordance with § 16-3-302(g).

(k) **Public meeting not required for denial of waiver request.** This section does not prohibit the approving authority from denying a request for a waiver under § 16-3-302 without a public meeting, nor does it confer on the person submitting a request for a waiver the right to a public meeting before a denial.

(1985 Code, Art. 21, § 3-303) (Bill No. 53-01; Bill No. 1-02; Bill No. 65-03; Bill No. 23-04)

§ 16-3-304. Public stormwater management practices.

(a) **Definition.** In this section, "public stormwater management practice" means a stormwater management practice that is owned by the County.

(b) **Requirements.** Each public stormwater management practice shall be constructed in accordance with the provisions of the grading permit before acceptance by the County and have preventive maintenance performed in accordance with § 16-3-404.

(1985 Code, Art. 21, § 3-304) (Bill No. 53-01)

§ 16-3-305. Private stormwater management practices.

(a) **Definition.** In this section, "private stormwater management practice" means a stormwater management practice that is not owned by the County.

(b) **Inspection and maintenance agreement.** Before the issuance of a grading permit for property that has a private stormwater management practice, the developer and, if different, the owner of the property shall execute an inspection and maintenance agreement with the County.

(c) **Scope of agreement.** The inspection and maintenance agreement shall:

(1) provide that the developer shall be responsible for installation of the stormwater management practices in accordance with this title;

(2) bind subsequent owners of the property served by any onsite stormwater management practice to the agreement;

(3) provide for access to the onsite stormwater management practice as necessary for inspection by the County or its agents or contractors to ensure that the

practice is properly maintained in accordance with the design standards and the provisions of this title;

(4) provide that whenever the applicant and, if different, the owner of the property, after reasonable notice by the Department, fail to correct a violation of this title, the Department may perform the necessary work to correct the violation and return the stormwater management practice to proper working condition;

(5) provide that the cost of work performed by the Department under the provisions of this title shall be levied and collected from the owner of the property in accordance with subsection (d); and

(6) be recorded among the land records of the County.

(d) **Liability for cost of work performed by the Department.** The cost of work performed by the Department under the provisions of this section shall be levied and collected from the owner of the property in the same manner as County real property taxes are levied and collected and shall have the same priority, bear the same interest and penalties, and in every respect be treated as County real property taxes.

(e) **Repairs, restoration, and maintenance by property owner.** The owner of the property on which work has been performed under this title for private stormwater management practices, and any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all grade surfaces, walls, drains, dams and structures, vegetation, erosion and sediment control measures, and other protective devices. Repairs, restoration, or maintenance shall be in accordance with the approved stormwater management plans.

(f) **Water from public stormwater management practice.** Private stormwater management practices may not receive water directly from a public stormwater management practice unless permission is granted by the owner of the private stormwater management practice.

(1985 Code, Art. 21, § 3-305) (Bill No. 53-01)

SUBTITLE 4. SECURITY, INSPECTION, AND MAINTENANCE

§ 16-3-401. Security.

(a) **Security guarantee.** The construction of each stormwater management practice shall be guaranteed by security that:

(1) is provided with an application for a grading permit;

(2) is in a form approved by the County;

(3) is in an amount equal to the estimated cost of construction and incidental costs to cover processing, administration, and inflation over the period of construction; and

(4) contains provisions for forfeiture for failure to complete work as specified in the approved stormwater management plan; the use of the forfeited security to pay for the work that was not completed, as required; the right of the County to enter upon the site of the development in order to complete the construction of each stormwater management practice; and compliance with all of the provisions of this title.

(b) **Release of security.** The Department may not release the security until a final inspection has been performed in accordance with § 16-3-402 and as-built plans and

an as-built certification have been submitted in accordance with § 16-3-403.

(c) **Partial release of security.** The Department may use a procedure to partially release the security as various stages of construction are completed and accepted by the Department, but only if the procedures used for partially releasing the security are specified on the stormwater management plan before approval of the plan.
(1985 Code, Art. 21, § 3-401) (Bill No. 53-01)

§ 16-3-402. Inspection.

(a) **Generally.** The Department shall make and document regular inspections, at a minimum, at the stages of construction specified in the County Procedures Manual.

(b) **Department responsibilities.** The Department shall:

(1) require the developer to notify the Department at least 48 hours before commencement and on completion of any work in conjunction with the stormwater management plan; and

(2) maintain and make available for public inspection during regular business hours, construction inspection reports, record drawings, initial inspection reports, and triennial inspection reports.

(c) **Contents of written inspection reports.** The written inspection reports shall include the date and location of the inspection; whether construction was in compliance with the approved stormwater management plan; any variations from the approved construction specifications; and any violations that exist on the site.

(d) **Developer not to proceed until inspection and approval.** A developer may not proceed with work until the Department inspects and approves the work previously completed and furnishes to the developer copies of the inspection reports after completion of each required inspection.

(e) **Written notice of violations.** When a violation is observed, the Department shall give written notice to the developer and onsite personnel, describing the nature of the violation and the required corrective action.
(1985 Code, Art. 21, § 3-402) (Bill No. 53-01)

§ 16-3-403. Completion.

(a) **Submission of as-built plans and certification.** Once construction is complete, as-built plans and an as-built certification shall be submitted to the Department by either a professional engineer, professional land surveyor, or landscape architect licensed in the State to ensure that constructed stormwater management practices and stormwater conveyance systems comply with the approved stormwater management plan; comply with the Anne Arundel Soil Conservation District small pond approval, if necessary; and have been tested and inspected in accordance with this title.

(b) **Contents of as-built certification.** At a minimum, the as-built certification shall include a set of drawings comparing the approved stormwater management plan with what was constructed.

(c) **Additional information may be required.** The Department may require any additional information that it considers necessary to determine compliance of construction with approved stormwater management plans.

(d) **Notice of construction completion.** Within 45 days of completion of

construction, the Department shall submit notice of construction completion for each stormwater management practice to the administration on a form supplied by the administration and, if best management practices requiring soil conservation district approval are constructed, to the Anne Arundel Soil Conservation District.
(1985 Code, Art. 21, § 3-403) (Bill No. 53-01)

§ 16-3-404. Maintenance.

(a) **Generally.** The Department shall ensure that preventative or routine maintenance is performed by inspecting all stormwater management practices.

(b) **Inspections.** Maintenance inspections shall occur during the first year of operation and, thereafter, at least once every three years.

(c) **Inspection reports.** The Department shall prepare and keep, in accordance with the County Procedures Manual, maintenance inspection reports for all stormwater management practices.

(d) **Notice of deficiencies.** The Department shall give notice to the owner of any deficiencies discovered from a maintenance inspection of a stormwater management practice. After notice is given, the owner shall have a reasonable time within which to correct the deficiencies. The Department shall conduct a subsequent inspection to ensure completion of the repairs and, if repairs are not undertaken or are not found to be done properly, undertake enforcement procedures.

(e) **Immediate danger.** If, on inspection by the Department, the condition of a stormwater management practice presents an immediate danger to the public health or safety because of an unsafe condition or improper maintenance, the Department shall take such action as may be necessary to protect the public and make the practice safe. Any cost incurred by the County shall be assessed against the owner, as provided in § 16-3-305(d).
(1985 Code, Art. 21, § 3-404) (Bill No. 53-01)

SUBTITLE 5. ENFORCEMENT, VIOLATIONS, AND PENALTIES

§ 16-3-501. Enforcement of approved plans.

(a) **Generally.** The Department may use any one or a combination of the actions set forth in this section to enforce the provisions of this title. Any step in the enforcement process may be taken at any time, depending on the severity of the violation, as determined by the Department.

(b) **Notice of violation.** If the Department determines that a site is not in compliance with an approved stormwater management plan or that any work or activity at a site is being undertaken in an unsafe and dangerous manner or contrary to the requirements of this title, the department shall immediately issue a notice of violation specifying the need for the violation to be corrected.

(c) **Stop-work order.** If, after issuance of a notice of violation, reasonable efforts to correct the violation are not undertaken or the violation persists, the Department shall issue a stop-work order for the site and may proceed against the security or refer the matter for legal action. A stop-work order shall be in writing; state the conditions under

which the work may be resumed; and be given to the owner of the property, the owner's agent, or the person doing the work and be posted at the property in a conspicuous location.

(d) **Suspension or revocation of grading permit.** The Department may suspend or revoke any grading permit issued by the Department after written notice is given to the permittee for any of the following reasons, as determined by the Department:

(1) violation of or failure to perform the work in accordance with the conditions of the approved stormwater management plan or Anne Arundel Soil Conservation District small pond approval;

(2) change in site stormwater runoff characteristics on which an approval or waiver was granted;

(3) noncompliance with a notice of violation or stop-work order issued for the construction of the stormwater management practice;

(4) existence of an immediate danger in a downstream area; or

(5) the Anne Arundel Soil Conservation District voids the sediment and erosion control approval or small pond approval.

(e) **Civil action or criminal prosecution.** In addition to any other sanctions, a civil action or criminal prosecution may be brought against any person in violation of this title.

(1985 Code, Art. 21, § 3-501) (Bill No. 53-01)

§ 16-3-502. Violations.

In addition to other acts or omissions that constitute violations of this title, it is a violation of this title for a person to:

(1) discharge or permit the discharge of stormwater runoff from a site into any storm drain or watercourse without first obtaining the approval of the County;

(2) spill, dump, or dispose of any material or substance other than natural stormwater runoff into a storm drain or watercourse;

(3) do any work on a site that is not in accordance with a stormwater management plan approved by the County;

(4) fail to maintain in good condition any stormwater management practice;

(5) fail to repair promptly and restore all graded surfaces, walks, drains, dams and structures, vegetation, erosion and sediment control measures, and other protective devices; or

(6) work at a site after a stop-work order has been served or posted under § 16-3-501, except for work required to be undertaken by the stop-work order.

(1985 Code, Art. 21, § 3-502) (Bill No. 53-01)

§ 16-3-503. Injunctive relief.

The Director may enforce the provisions of this title through injunctive proceedings or any other appropriate proceedings. A court of competent jurisdiction may issue a temporary restraining order, a preliminary or final injunction, or an order for other relief to restrain or correct violations of this title.

(1985 Code, Art. 21, § 3-503) (Bill No. 53-01)

Exhibit B
Storm Drainage Design Checklist

Anne Arundel County Office of Planning and Zoning
Storm Drainage Design Checklist

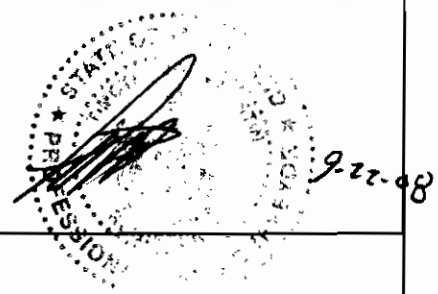
Project Name	Odenton Business Park Lot 4
Project Number	G02013607
Engineer	Bay Engineering, Inc. - c/o Timothy J. Martin, L.S.

Plans are to be designed based on the standards set forth in the Anne Arundel County Design Manual Standards and Specifications, and all other manuals as stipulated in the Anne Arundel County Code.

This checklist is being provided as a general guide for identifying the **minimum** features that should be addressed prior to submitting the plans for review. **The design consultant by assigning his/her seal and signature certifies that the plans were completed in accordance with the current design standards.**

Plans that are incomplete as per the checklist items will result in an incomplete review. Plans will be returned to the consultant and the resubmittal will be considered a first submittal in the review process.

Engineer's Certification (Seal, Signature and expiration information)



Instructions:

1. **The checklist must be submitted with the first submittal.**
2. Packages submitted without the completed checklist will not be reviewed and will be returned to the applicant.
3. Applicant should insert into each box either of the following:
   a. √ This item has been addressed
   b. **N** This item does not apply to this project
4. All boxes must be checked.
5. The review engineer will upon review of the plans verify by inserting either of the following:
   a. √ This item has been adequately addressed or agree that it does not apply.
   b. **X** This item has not been adequately addressed. (Use the remarks column to indicate via letter designation, which item needs to be addressed or if a more detailed response is required then indicate in the remarks column that the item is addressed in the comment letter).
6. A copy of the checklist will be returned to the applicant as an attachment to the comment letter.
7. The Checklist must be returned with the second submittal utilizing the same check format indicated in item 3 above.

Anne Arundel County Office of Planning and Zoning

Storm Drainage Design Checklist

	First Submittal		Second Submittal		Storm Drain Checklist	Comments
	Des.	Rev.	Des.	Rev.		
1	✓	✓	✓		Adequacy of Facilities for Storm Drainage met. **A)** Adequate SWM on Site and **B)** Adequate conveyance to the point of investigation (Demonstrated by downstream analysis)	
2	✓	✓	✓		**Point of Investigation:** A) Provide drainage area map that clearly shows B) Site drainage area C) Tributary Drainage area **Label** D) Site outfall E) Tributary outfall F) Point of Investigation G) Provide photo walking tour or computations to show non erosive conditions or velocity for the 10 year storm from site outfall(s) to the point(s) of investigation.	
					Computations	
3	✓	✓	✓		**Design as per Anne Arundel County Design Manual Chapter V**	
4	✓	✓	✓		**Computation booklet is** A)Provided B) Bound, C) Sheets numbered D) Signed and Sealed by design professional E) Contains narrative which clearly indicates methodology used G) Broken into sections based on post development study points.	
5	✓	✓	✓		**Study point(s):** A) Study point(s) same for pre and post development B) Clearly labeled and numbered.	
6	✓	✓	✓		**Downstream Analysis POI:** Show :A) Site outfall drainage area B) Tributary outfall drainage area C) Point of investigation D) Include photo tour and velocity and capacity computations from site outfall(s) to POI E) Submitted with the first submittal	
7	✓	✓	✓		**Adequacy of downstream facilities:** Closed system A) Verified by previously approved as built plans and computations (Copies provided with first submittal) or Analysis B)Addresses the capacity and hydraulic gradient C) Based on 10 year storm D) Runoff amount based on Zoning of contributing drainage area. Open Channel E) Velocity and flow depth computed at relevant points (Constrictions, additional tributary etc.)	
8	✓	✓	✓		**Allowable discharge after site development** is based on capacity of receiving conduit. Flow to conduit is based on developed conditions of entire drainage area based on zoning.	
9	N	✓	N		**Outfall computations** At pipe discharge below rip rap outfall show: A)Cross section B) Quantity C) Velocity D) Depth of flow E) Pre and post development flow conditions	
10	N	✓	N		**Flood plain:A)** Determine if flood plain exists on site using 48 inch pipe rule. B) If flood plain exists use Hec-Ras to determine water surface elevations on site C) Starting watersurface elevation determined by acceptable methods (Hy-8 or culvert analysis if near culvert) D) Error messages in output addressed.	
11	✓	✓	✓		The same method of computation used when comparing runoff (i.e. if Tr-20 used for post development runoff, it must be used for pre development as well)	
12	✓	✓	✓		Drainage area information used in computations clearly depicted on drainage area maps.	
					Drainage Area Maps	
13	✓	✓	✓		**All Drainage area maps**: **A)** Contours numbered with legible lettering **B)** contour lines extend at least 200 ' beyond drainage area boundaries **C)** Travel path for Tc shown with segments labeled (distance, slope and "n" factor) **D)** Curve number or C Factor areas shown by contrasting shading or colors E) acreage shown) **F)** North arrow shown **G)** Scale shown.	
14	✓	✓	✓		Separate drainage area maps for existing and proposed conditions.	
15	✓	✓	✓		**A)** All maps used for comparison such as existing and proposed development shown at same scale. **B)** Maps used to develop curve numbers such as zoning and soil shown at same scale as applicable drainage area map.	
16	✓	✓	✓		A) Existing conditions drainage area map must show entire drainage area to site. Runoff amount for offsite areas must: B) Be shown C)Curve number based on zoning.	

Anne Arundel County Office of Planning and Zoning
Storm Drainage Design Checklist

	First Submittal		Second Submittal		Storm Drain Checklist	Remarks
	Des.	Rev.	Des.	Rev.		
17	✓	✓	✓		Information shown on drainage area map must correlate with information used in computation booklet.	
18	✓	✓	✓		Scale shall be 1" = 100' for sites with acreage ≤ 25 acres, or 1" = 200' for sites with acreage > 25 acres.	
19	✓	✓	✓		**Drainage area map for proposed drainage system: A)Must** be shown schematically, complete with manhole, inlets and structures numbered B) Each tributary area must be lettered for reference to schedules and flow tabulations C) Use a scale that allows information to be clearly shown	
20	✓	✓	✓		For small projects, road, storm water management and storm drainage design details may be shown as one plan set with each item (road, storm drain etc.) being shown on separate sheets. If the number of plan sheets for each item exceeds 4 sheets, then it should be broken out as a separate set with its own title sheet etc.	
21	✓	✓	✓		***Title block*** *(Anne Arundel County Office of Planning and Zoning title block required on all sheets) shall include: A) Project Name and number B) Sheet Title C) Date, D) Tax Map, Block and Parcel E) Assessment District, F) Zoning*	
22	✓	✓	✓		Legal name, address, and telephone number of the owner, developer, applicant, and design consultant, and	
23	✓	✓	✓		Signature block with design consultant information	
24	✓	✓	✓		Signature and seal of a design professional registered in the State of Maryland (Comar, Section 14-101),	
25	✓	✓	✓		Revision Block	
26	✓	✓	✓		**Vicinity Map** (minimum 4" x 4" Scale 2000' = 1") (Title Sheet) A) Located in upper right hand corner, B) North arrow shown to top C) Scale shown D) Roads labeled	
28	✓	✓	✓		**Location Plan (Title Sheet)** Scale 1"=200'	
29	✓	✓	✓		**Index of Drawings Table (Title Sheet)** A) All drawing titles are shown in table and labeled accordingly.	
31	✓	✓	✓		**Coordinates** - Three "tics" shown on all applicable plan sheets in multiples of 250'	
32	✓	✓	✓		**North Arrow shown**	
33	✓	✓	✓		**General Notes (Notes common to all drawings on Title sheet only)**	
34	✓	✓	✓		Project specific notes added *(such as meter note, jacking note, SHA Agreement/Permit on state roads, etc.)*.	
35	✓	✓	✓		**Benchmark** - B. M. No.,description and elevation. (Vertical control NAVD 1929 or NAVD1988) consultant must indicate which is used. No assumptions	
36	✓	✓	✓		***Special Details*** must be shown in accordance with Standard Details, as much as is feasible.	
37	✓	✓	✓		**Scale** shown in title block or centered below plan/profile.	
38	N	✓	✓		Match lines shown were applicable and correctly labeled	
39	✓	✓	✓		Outfall statement on title page	
40	✓	✓	✓		**Drafting standards** As per design manual (Chapter 1 section II.D.3)	

Anne Arundel County Office of Planning and Zoning
Storm Drainage Design Checklist

	First Submittal		Second Submittal		Storm Drain Checklist	Remarks
	Des.	Rev.	Des.	Rev.		
41	✓	✓	✓		Bearing and distances shown on plan and plat	
42	✓	✓	✓		Easements labeled as temporary or permanent	
43	✓	✓	✓		Existing and proposed right of way widths shown.	
44	N		✓		Right of Way plats at same scale as public drawings plan view.	
45	✓	✓	✓		Topographic information is field run	
46	✓	✓	✓		Horizontal control established using current criteria (NAD 83).No assumptions	
47	✓	✓	✓		Rights To Discharge: A) Acquired for offsite properties B) Shown for on-site	
48	✓	✓	✓		Offsite easements and rights of way **acquired**	
49	N	✓	✓		Outfall statement on title page	
50	N	✓	✓		Overall drainage area map showing entire drainage area to site	
51	✓	✓	✓		Names of all roads and streets are shown and are not obstructing other information.	
52	✓	✓	✓		**Abutting properties** show A) Lot numbers, and street address numbers B)Owners name and Tax Account Number	
53	✓	✓	✓		Show all existing surface features including poles, fences, buildings, driveways, hydrants, shrubs, trees, pavement, inlets, curb and gutter lines, manholes, etc.	
54	✓	✓	✓		Show existing grades at least 100' beyond right-of-way lines and 200' beyond ends of traffic ways or beyond limits of disturbance.	
56	✓	✓	✓		Existing and proposed sewer and water lines and structures are located and labeled.	
57	✓	✓	✓		Flood plain limits shown, and flood plain source referenced, if previously platted flood plain.	
58	✓	✓	✓		**Scale 1"=40'** (Alternate scale approved by OPZ)	
59	✓	✓	✓		All structures A) adequately located in plan view either by offset from permanent structures or coordinates B)Labeled and Numbered starting from downstream end of the system.	
60	✓	✓	✓		Topography A) Existing contours B) Proposed contours	
61	✓	✓	✓		Existing and proposed utilities A) Shown with appropriate line weight and symbol B) Clearances from Storm Drain shown on plan and profile.	
62	✓	✓	✓		Drawing and file number shown for all existing sewer, water, storm drains and their manholes, fire hydrants, and appurtenances in accordance with the record drawings.	
63	✓	✓	✓		Invert and rim elevations for existing utilities are shown and checked against Record Drawings.	
64	N	✓	✓		Pipes A) are dimensioned from surveyed location (property lines, road centerlines, traverse lines, etc.). B) Size of pipe between each structure is labeled	
65	✓	✓	✓		Proposed and existing easements shown and dimensioned.	
66	N	✓	✓		Curve data is shown for pipes laid on curves (minimum length is 4').	
67	N	✓	✓		Method of crossing existing roads labeled (Jack and bore, open cut, etc.)	
68	N	✓	✓		Each inlet is dimensioned from surveyed location (dimensioned from P.C. or P.T. of curb, property lines, traverse lines, station and offsets or are coordinated).	
69	✓	✓	✓		**Open Channels** A) Typical section shown B)Flow Q10, Velocity (V10), Depth (d), Slope (S) shown	
70	N	✓	✓		Show location of septic systems in close proximity to open swales (25' minimum clearance)	
71	N	✓	✓		Outfall apron dimensions shown (width, length, dimensioned),	

	First Submittal		Second Submittal		Storm Drain Checklist	Remarks
	Des.	Rev.	Des.	Rev.		
					Profile	
72	N	✓	N		The profile is to be shown below the corresponding plan. If profile is shown on a separate sheet, the profile should be labeled to indicate the location of the plan view.	
73	N	✓	N		**Scale** 1"= 40' horizontal scale and 1"= 4' vertical	
74	N	✓	N		**Existing and proposed** grades shown and extended 100 feet beyond storm drain.	
75	N	✓	N		**Structures** A) Structure numbers same as in plan view B) 10 yr HGL elevation shown C) Inverts labeled (upstream and downstream) D)Centerline stations are shown and are same as plan view.	
76	N	✓	N		**Pipes between each structure** A) Inverts labeled B) Flow (Q10) C) Velocity(V10) D) Friction Slope (SF) E) Actual Slope, material, class (if applicable) shown below each run.F) Encasement or Concrete cradle shown as necessary, G) Maximum and minimum cover checked H) Utility crossings shown I) Type of utility (water, sewer etc) and clearances labeled	
77	N	✓	N		A) Full trench compaction and/or flowable fill is shown as required.B)Protective fill indicated for all pipes with less than two feet of cover C) Protective coating/ special construction details specified for pipes in areas of acid soils or other similar conditions.	
78	N	✓	N		**Outfall** A) End sections and Headwalls labeled B) Riprap apron length, depth, type,D50 and toe wall shown C) Profile of existing ground shown for 200 feet below riprap D) Cross section beyond toe of rip rap shows existing and proposed E) Flow F)Velocity G) Depth for 10 and 100 year rainfall event.	
79	N	✓	N		**Culverts** A) Sized using appropriate storm event based on the road classification B) Show erosion protection upstream and downstream C) Show water surface elevation for design storm in profile.	
80	N	✓	N		**Tables** A) Flow tabulation (preferably shown on same sheet as drainage area map) B) Structure schedule shown (preferably shown on same sheet as structures)	
81	N	✓	N		**Structure Schedule** shall contain A) Structure type (inlet, manhole etc.) B) Size C) Top grate or rim elevation D) Invert elevations E) Number F) Location (coordinates or station & offset) G) County Detail number H) If special structure indicate where detail is found.	
82	N	✓	N		**Flood Plain** A)Cross sections shown and labeled B) Q100 and Elevation shown for each cross section	
					Miscellaneous	
83	✓	✓	✓		**Quality control** A)Information shown in computations is same as on plans B) Corresponding information on plan view is same as on profile.	
84	✓	✓	✓		**Plat** check easements/ROW shown on plans are shown on applicable plats.	
85	N	✓	N		***Traffic Control Plan*** (see section VIII, Anne Arundel County Dept. of Public Works Design Manual, January 2001).	

Exhibit C
Stormwater Management Checklist

ANNE ARUNDEL COUNTY
MARYLAND

STAFF ONLY
Permit No.
Revision No.
Date

Stormwater Management Checklist
(SWM - 1)

C08-0066 00

RECEIVED
AUG 19 2008
PERMIT APPLICATION CENTER

Date

Subdivision Name: Odenton Business Park Lot 4

Subdivision # _____ Project # _____

Site Plan # _____

Instructions: All stormwater management plan submissions shall contain the following information. Any submissions brought to the County with missing or incomplete plans, may be rejected and not reviewed until all necessary information has been provided. It should be noted that not all items contained below will, necessarily, be required for every project.

Consulting Engineer shall place one of the following marks (as appropriate) on each line (engineering reviewer shall verify each mark).
N/A - not applicable ***Y*** *- provided*

Note: The following checklist is provided to assist the design professional in developing a complete stormwater management plan set to expedite review by the Department. All final stormwater management plans submitted for review are to include a copy of the checklists(s) signed by a registered design professional in responsible charge with the firm. Submittals made that do not include the checklist will be returned without review, comments, or approval. Compliance with the checklist, however, in no way is meant to relieve the design professional of responsibility for project design.

Y 1. ***Stormwater Management Report*** *(see Stormwater Management Final Plan Checklist in the Anne Arundel County Stormwater Management Practices and Procedures Manual)*

2. ***Geotechnical Report*** *(see Geotechnical Report Checklist in the Anne Arundel County Stormwater Management Practices and Procedures Manaual)*

3. ***Cover Sheet*** *(note: a separate cover sheet will be required when the utility plan set consists of three or more sheets.)*

Y *a)* Title block (Anne Arundel County Office of Planning and Zoning title block required on all sheets) shall include:
- Y 1) Project Name,
- Y 2) Project Title
- Y 3) Project Type,
- Y 4) Scale,
- Y 5) Date,
- Y 6) Tax Map, Block, and Parcel,
- Y 7) Subdivision name and lot number,
- Y 8) Assessment District,
- Y 9) Site Zoning,
- Y 10) Zip Code, and
- Y 11) signature and seal of a design professional registered in the State of Maryland (Article 16, Section 2-206).

Y *b) Vicinity Map* (minimum 4" x 4")
- Y 1) vicinity map shall be located in upper right hand corner.
- Y 2) vicinity map shall be oriented with north to the top.
- Y 3) scale is shown (generally: 2000' = 1").
- Y 4) state and county roads are shown and labeled.
- Y 5) site is shown, shaded, and labeled.
- Y 6) north arrow shown.

Y c) *Location Plan* (show limits of project area or limits of proposed subdivision)
- Y 1) scale shall be 1-inch to 200 feet *(note: consultant must get county staff approval for use of a smaller scale)*
- Y 2) north arrow shown.
- Y 3) existing and proposed sewer and water lines, valves, and appurtenances are located and labeled.
- Y 4) existing and proposed manholes are located and labeled.
- N/A 5) existing and proposed fire hydrants and coverages (radii, as appropriate) are located and labeled.
- N/A 6) all flood plain limits have been shown.
- Y 7) coverage of individual plan sheet is delineated.
- Y 8) all road names are shown.

Y d) *Index of Drawings Table*
- Y 1) all drawing titles are shown in table and labeled accordingly.

Y e) *General Notes*
- Y 1) appropriate general notes have been added *(note: see SWM General Notes List).*
- Y 2) project specific notes added.
- Y 3) a note specifying the watershed in which the project is located.
- Y 4) phone number and agency titles correct.
- Y 5) pipe material and material class correct.
- Y 6) maintenance and inspection notes are correct.

Y f) *Legend*

4. *Plan Sheets*

Y a) *General Information*
- Y 1) Recorded plat reference.
- Y 2) Zoning
- Y 3) North arrow shown with appropriate NAD reference
- Y 4) Three (3) coordinate ticks shown.
- Y 5) SCS soil types
- Y 6) Contours
  - Y (a) existing - dashed or screened and labeled
  - Y (b) proposed - solid and labeled
- N/A 7) Critical area boundary, if applicable.
- Y 8) Street names and alignment.
- Y 9) Property lines with bearings and distances
- Y 10) Lot dimensions, lot numbers, and street address numbers.
- Y 11) Owners and tax account numbers in all areas up to 200 feet beyond property boundaries.
- Y 12) State road labeled on plan, where such roads are shown.
- Y 13) Dimensions between street lines and curb lines.
- Y 14) Drawing numbers of all proposed adjoining stormwater management plans shown.
- Y 15) Right-of-way reference.
- Y 16) Scales shown in proper location.
- Y 17) Two (2) Benchmarks shown using proper symbol.
  - Y (a) Benchmark labeled with number,
  - Y (b) description,
  - Y (c) and elevation.
- Y 18) Soil boring and water table data shown.
- Y 19) Existing structures are shown, labeled and using the proper symbol, including
  - Y (a) curb and gutter,
  - Y (b) utilities,
  - Y (c) road,
  - Y (d) buildings, and
  - Y (e) drainage facilities.
- Y 20) Proposed improvements are shown, labeled and using the proper symbol, including
  - Y (a) buildings,
  - Y (b) roads,
  - Y (c) structures,
  - Y (d) drainage facilities,
  - Y (e) utilities, and
  - Y (f) curb and gutter.

Y 21) Right-of-way or easement
Y (a) is provided where stormwater management is not located within road R/W.
Y (b) right-of-way or easement size is shown correctly based on depth of facility and buffer width requirements.
Y (c) to be indicated on plan and clearly labeled as to existing or proposed.
Y 22) Engineer's seal and signature.

b) Environmental Conservation Plan

Y 1) Drawing size shall be 24" x 36"
Y 2) Existing topography including;
Y (a) roads,
Y (b) utilities,
Y (c) buildings, and
Y (d) other structures.
3) The following Primary Environmental Features must be shown on the plan;
N/A (a) Streams and Stream Buffers
N/A (1) Type or Use of stream is clearly labeled.
N/A (2) Buffer is computed and clearly labeled.
Y (b) Wetland and Wetland buffers.
N/A (c) 100 year Floodplains (see Floodplains checklist FP - 1).
N/A (1) cross-sections shown and labeled.
N/A (2) floodplain easement line shown including bearings and distances.
N/A (3) floodplain limit shown parallel to contours.
4) The following Secondary Environmental Features must be shown on the plan;
N/A (a) Critical Area boundaries, if any
✓ (b) Soil types,
✓ (c) Steep slopes,
✓ (d) Forests,
N/A (e) Cultural resources, and
✓ (f) Other existing topographic features.

c) Drainage Area Maps

Y 1) scale shall be no smaller than 1" = 200' except where this scale would require extra drawings, then it shall be no smaller than 1" = 500'.
Y 2) entire drainage area must be shown.
Y 3) entire proposed drainage system must be shown schematically, complete with manhole, inlets, structures and stormwater BMP's.
Y 4) all inlets, manholes, structures, and stormwater Best Management Practices (BMP's) must be labeled.
Y 5) each tributary area shall be lettered or numbered.
Y 6) drainage area labels, total tributary area, time of concentration to points under investigation, rainfall intensity, and runoff curve numbers shall be shown.
Y 7) the Stormwater Credit Features must be identified and delineated.
Y 8) The site outfall is identified and labeled.
Y 9) The site tributary is identified and labeled.
Y 10) The point of investigation is identified, labeled and is acceptable.

d) Stormwater Management Plans

1) plan of each Stormwater Management BMP showing (as required);
Y (a) scale shall be 1" = 40' minimum,
Y (b) each facility labeled in accordance with the 2000 Maryland Stormwater Design Manual (P-1, Micropool Extended Detention Pond, P-2, Wet Pond, W-4, Pocket Wetland, etc.),
Y (c) one 'BMP Group Checklist' sheet per BMP (BMP Group 1, BMP Group 2, etc.),
Y (d) contours spaced as required to clearly illustrate required grading,
Y (e) spot elevations shown as required to clearly illustrate required grading,
N/A (f) the ten year storm water surface elevation shown in plan as a contour (if applicable),
N/A (g) the one hundred year storm water surface elevation shown in plan as a contour (if applicable),
(h) profile along centerline of structure/embankment,
(i) profile of centerline of principal spillway, showing;
N/A (1) riser structure with inverts,
N/A (2) barrel with inlet and outlet inverts,
N/A (3) anti-seep collars located, dimensioned and labeled,
(4) phreatic line,

X (5) water surface elevations for water quality, channel protection volume, flood protection volume, and extreme flood volume, as required,
✓ (6) top of constructed dam elevation labeled,
✓ (7) top of settled dam elevation labeled, and
✓ (8) embankment side slopes.
N/A (j) profile along centerline of emergency spillway,
✓ (k) soil borings,
✓ (1) shown and labeled at the appropriate locations,
✓ (2) the appropriate number of borings are shown, and
✓ (3) the logs and notes are shown.
N/A (l) cross-section of the emergency spillway at the control section,
N/A (m) Riser structure detail, including
(1) type,
(2) size and dimensions,
(3) reinforcing,
(4) all orifice(s) dimensioned and labeled,
(5) top elevation,
(6) water surface elevations for water quality, channel protection volume, flood protection volume, and extreme flood volume, as required,
(7) anti-flotation footing dimensioned and labeled
(8) all inlet and outlet pipes with inverts, and
(9) trash racks.
N/A (n) Trash rack details including;
(1) type of material, and
(2) dimensions.
N/A (o) Note describing that muskrat barriers will be installed at the time of conversion to stormwater management is included.
N/A (p) Access ramp meets the minimum requirements.
N/A (q) Fencing, if required, meets the standards in the Design Manual.

Applicant's Certification

I, the undersigned, hereby certify that the attached Stormwater Management Plans submittal includes all items required by Article 16 of the Anne Arundel County Code. I understand that if any of the items required are found to be missing from the submittal, the Stormwater Management Plan will not be acceptable for review and will be returned as incomplete. The applicant is aware of this criteria and will accept all responsibility for delays due to incomplete submittals. I am enclosing an explanation for each item which I feel is not required and, therefore, has not been included in this submittal package.

Design Professional's signature  Date 8-11-09

NOTE: DESIGN PROFESSIONAL MUST SIGN AND SEAL THIS CHECKLIST

Review Engineer's signature Date

Exhibit D
Excerpts from Anne Arundel County Stormwater Design Review Database

Anne Arundel County Office Of Planning and Zoning
Projects due sorted alphabetically
December 2008

Project Name	*Number*	*Type*	*Due Date*	*TEAM*	*Planner*	*Engineer*	*Traffic*
A.A. County -DPW Central Sanitation Facility	MN 10168 (G02012345)	Modification	12/4/2008	North	William Love	Emmanuel Kuti	
Archdiocese of Baltimore/Dorsey Road	P08-0115	Final Subdivision	12/11/2008	North	Brandy Vos	David Obi	
Arundel Bay Christian Academy at Felgenhauer Prop.	P08-0114 00 NM	Final Subdivision	12/26/2008	South	Kathy Shatt	John Bassford	
Arundel Bay Christian Academy at Felgenhauer Prop.	10041 & 10041A	Modification	12/17/2008	South	Kathy Shatt	John Bassford	Robert Tyson
Arundel Preserve Infra Phase 2, Par 9A, 10B & Open Space	P07-0217 01 NF	Final Subdivision	12/15/2008	Regional	Courtney Foley	Ernest Larmie	
Arundel Preserve, Town Center at	M#9921	Modification	12/3/2008	Regional	Courtney Foley	Ernest Larmie	
Arundel Preserve, Town Center at	F08-006	Modification	12/3/2008	Regional	Courtney Foley	Ernest Larmie	
Arundel Preserve, Town Center at	C08-0032 00 NC	SDP	12/3/2008	Regional	Courtney Foley		
Arundel Preserve/The Enclave @ Ph 2 Parcel 10A, Sec 2	P07-0147 00 OF	Final Subdivision	12/1/2008	Regional	Courtney Foley	Joe Di Marino	
Baldwin Manor Phase 2	P06-0116	Minor Subdivision	12/11/2008	South	Michael Murray		
Barr, Edward & Mary	MS04-136	Minor Subdivision	12/9/2008	South	Michael Murray		
Belle Grove Inn Assoc, LLC Resub of Reserve Par.	P08-0040-00-NF	Final Subdivision	12/22/2008	North	oseanne Zimmerma	David Obi	
Bias, Harvey	MS05-023	Minor Subdivision	12/15/2008	South	Kathy Shatt	John Bory	
Boat Lifts Unlimited	C07-0119 00 NC	SDP	12/4/2008	South	Kathy Shatt	John Igbinovia	
Boatlifts Unlimited	10154	Modification	12/4/2008	South	Kathy Shatt		
Bountys View Residue/Lords Bounty @	P08-0156 00 NF	Final Subdivision	12/29/2008	South	Cathy Bridges		
Burkes Choice	P08-0113 00 NS	Sketch Plan	12/16/2008	South	Dan Beverungen	John Bory	
Cambria Suites Hotel	C08-0065 (G02013603)	SDP	12/15/2008	North	Jeff Torney	Claudia O'Keeffe	Jane Elberti
Carrollton Manor, Lots 49-51 Blk. 1/Seerey Prop.	P07-0034 00 NF	Final Subdivision	12/11/2008	Critical Area	Thomas Burke	John Bassford	Jane Elberti
Carvel Beach p/o Lot 132/Bridgewater at	P06-0100	Final Subdivision	12/15/2008	North	Jeff Torney		
Carvel Beach/Leitz Property	10169	Modification	12/4/2008	Critical Area	Vanessa Crankfield		
Cedar Hill PUD	10164	Modification	12/3/2008	Regional	Vivian Marsh		
Chipolte@Severna Park Mall/Five seven Five (575) Ritchie Hwy	MN 10171 (C08-0094, B02251683)	Modification	12/10/2008	North	Karen Llanes	Claudia O'Keeffe	
Citrano/Huffard Prop. Parcel 2	10129	Modification	12/1/2008	Critical Area	Dan Gerzak	Rania Carriker	Jane Elberti
Clifford, Matthew Property	P06-0145	Final Subdivision	12/5/2008	South	Dan Beverungen	John Bory	
Crofton II Condo Lot 1 Resub	P07-0144 00 NF	Final Subdivision	12/22/2008	South	Cathy Bridges		
Crofton South, Lot 1	P08-0089 00 NF	Final Subdivision	12/5/2008	South	Donna Aulds	John Bory	Robert Tyson
Dailey, Loraine Property	10178	Modification	12/17/2008	North	Dan Gerzak		
Deer Run Hollow (Amended Plat)	P08-0120 00 NF	Final Subdivision	12/15/2008	South	Cathy Bridges		
Dorchester View	C08-0014	SDP	12/17/2008	North	Jeff Torney	Claudia O'Keeffe	Jane Elberti

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Project Name	*Number*	*Type*	*Due Date*	*TEAM*	*Planner*	*Engineer*	*Traffic*
Dorchester View	MN 10143 (C08-0014)	Modification	12/4/2008	North	Jeff Torney	Claudia O'Keeffe	Jane Elberti
Dorchester View	MN 10143 (P08-0154)	Modification	12/4/2008	North	Jeff Torney	Claudia O'Keeffe	Jane Elberti
Durner Family Property	P08-0047 00 NM	Minor Subdivision	12/15/2008	Critical Area	Dan Gerzak	Claudia O'Keeffe	
Easi Landing	C08-0061-00-NC (G02013584)	SDP	12/24/2008	North	oseanne Zimmerma	David Obi	Jane Elberti
East Park Center Res Parcel/Microtel Inn & Suites	P07-0239 00 NF	Final Subdivision	12/29/2008	South	Dan Beverungen	John Bory	
Eighty Three Hundred Ritchie Highway	C08-0088-00-NC (G02013706)	SDP	12/11/2008	North	William Love	Claudia O'Keeffe	Jane Elberti
Extra Space Storage of Pasadena	MN 10189 (C07-0104-01)	Modification	12/24/2008	North	William Love		
Fifteen Hundred Twenty five Dorsey Road	C05-0040-03-NC (G02011655)	SDP	12/24/2008	North	William Love	David Obi	Jane Elberti
Four Eleven College Parkway	10151	Modification	12/10/2008	South	Dan Beverungen		
Foxwell, Eliz Subdivision Lot 4/Bosse	P07-0127	Minor Subdivision	12/18/2008	North	Jeff Torney	Emmanuel Kuti	
Gerard Park	P07-0100	Final Subdivision	12/9/2008	North	Karen Llanes	Emmanuel Kuti	
Glen Burnie Crossing	10167	Modification	12/4/2008	Critical Area	Thomas Burke	John Bassford	
Glenn, Annie Subdivision, Lot 4	P08-0155	Minor Subdivision	12/29/2008	North	William Love	Emmanuel Kuti	Jane Elberti
Green Haven - Armiger Addn., Lots 1-28, Blk M	C07-0109 00 NC	SDP	12/24/2008	Critical Area	Dan Gerzak	Claudia O'Keeffe	
Grierson, Joan Property	MS04-111	Minor Subdivision	12/20/2008	South	Michael Murray		
Griffith Landing	10139	Modification	12/3/2008	South	Michael Murray	John Igbinovia	Robert Tyson
Griffith Landing	P07-0083 00 NF	Final Subdivision	12/5/2008	South	Michael Murray	John Igbinovia	
Gutsche, Graham Prop./Resub of Lot 2R	10165	Modification	12/24/2008	Critical Area	Dan Gerzak		
Gutsche, Graham Property/Resub Lot 2R	P08-0076 00 NM	Final Subdivision	12/18/2008	Critical Area	Dan Gerzak	John Bassford	
Hawthorne Ridge Farms, Lot 4R Resub.	P04-0198 00 OM	Final Subdivision	12/16/2008	South	Kathy Shatt	John Bory	
Hidden View Farm	P07-0156 00 NS	Sketch Plan	12/11/2008	Critical Area	Thomas Burke	John Bassford	
Howards Farm Lot 4	P07-0186	Minor Subdivision	12/8/2008	North	Karen Llanes		
Howlins Choice, Lot 2 Revised	P08-0066 00 NM	Final Subdivision	12/20/2008	South	Cathy Bridges		
Jacobs Forest	P05-0151 00 NF	Final Subdivision	12/16/2008	South	Michael Murray	John Igbinovia	Michael Mettle
Johnson Farm, East half of Lot 6	P08-0012	Final Subdivision	12/12/2008	North	Brandy Vos	Emmanuel Kuti	Jane Elberti
Johnson, Leslie R. Property	P08-0004 00 NF	Final Subdivision	12/26/2008	Critical Area	Dan Gerzak	John Bory	
Kawecki Property near Dreams Landing	P08-0150 00 NM	Final Subdivision	12/11/2008	Critical Area	Thomas Burke	John Bassford	Robert Tyson
Knox, June C. Property	10135	Modification	12/10/2008	Critical Area	Thomas Burke		
Kuczinski Property, Lot 25	P08-0015 00 NF	Final Subdivision	12/15/2008	South	Dan Beverungen		

ANNE ARUNDEL COUNTY MARYLAND

Anne Arundel County Office Of Planning and Zoning

Projects due sorted alphabetically

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Project Name	*Number*	*Type*	*Due Date*	*TEAM*	*Planner*	*Engineer*	*Traffic*
Lakemont Memorial Gardens	C08-0024 00 NC	SDP	12/15/2008	South	Dan Beverungen	John Bory	
Lamons Landing	P07-0219 00 NS	Sketch Plan	12/26/2008	Critical Area	Thomas Burke	David Obi	Jane Elberti
Linpro Harmans Property, Lot 4	C08-0046 00 NC	SDP	12/19/2008	South	Dan Beverungen	John Igbinovia	
Linthicum heights/Kromminga Prop. 5805 Marydel Rd.	MN 9834A (P08-0013)	Modification	12/18/2008	North	Karen Llanes	Claudia O'Keeffe	
Longshoremans Pl A, Lots 1, 2R, 4R, 5/Woodberry	P07-0106 00 NF	Final Subdivision	12/8/2008	Critical Area	Dan Gerzak		
Loretta Heights Lots 1-18, Blk B/Parole Office Building	C07-0088 00	SDP	12/22/2008	Regional	Courtney Foley	Joe Di Marino	Robert Tyson
Loretta Heights Lots 1-18, Blk. B/Parole Office Building	P2007-0184	Final Subdivision	12/22/2008	Regional	Courtney Foley	Joe Di Marino	Robert Tyson
Lowes of Glen Burnie, Garden Center Expansion	C08-0062 (G02013490, B02249453)	SDP	12/11/2008	North	Brandy Vos	Emmanuel Kuti	Jane Elberti
Mangee Property	P08-0045 00 NS	Sketch Plan	12/8/2008	Critical Area	Donna Aulds	Claudia O'Keeffe	
Margate Lot 178 p/o	P08-0140	Final Subdivision	12/8/2008	North	Karen Llanes	David Obi	Jane Elberti
McDonalds Restaurant, 719 Nursery Road	C08-0059 (G02013572)	SDP	12/10/2008	North	Brandy Vos	David Obi	Jane Elberti
McDonalds Restaurant, 7415 Ritchie Hwy.	C08-0090-00-NC (G02013717)	SDP	12/22/2008	North	Brandy Vos	Claudia O'Keeffe	Jane Elberti
Mid-Atlantic Community Church	C08-0063 00 NC	SDP	12/5/2008	South	Michael Murray	John Bory	Michael Mettle
Middlebury Addition	P07-0233-00 NF	Final Subdivision	12/22/2008	North	Jeff Torney	David Obi	Jane Elberti
Middlebury Addition	P07-0233-00-NF	Final Subdivision	12/22/2008	North	Jeff Torney	David Obi	Jane Elberti
MS06-047	MS06-047	Minor Subdivision	12/10/2008	Critical Area	Thomas Burke		
National Bus. Pk, BGE Guilford Road Substation	C08-0091 00 NC	SDP	12/24/2008	Regional	Courtney Foley	Joe Di Marino	Robert Tyson
National Business Park/Resub. Of Lots 21R-32RR	P08-0063 00 NF	Final Subdivision	12/8/2008	Regional	Courtney Foley		
Northpark	MN 10181 (P07-0094)	Modification	12/17/2008	North	William Love		
Odenton Business Park, Lot 4	C08-0066 00 NC	SDP	12/10/2008	Regional	Vivian Marsh	Ernest Larmie	Robert Tyson
One Hundred Nine Five Admiral Cochrane Drive	C08-0031 00 NC	SDP	12/5/2008	Regional	Courtney Foley		Robert Tyson
One Hundred Ninety Five Admiral Cochrane Drive	M#9915	Modification	12/5/2008	Regional	Courtney Foley		
Parkside Phase 2 Infrastructure	P07-0067 00 0F	Final Subdivision	12/5/2008	Regional	Vivian Marsh	Joe Di Marino	
Parkside Phs 3B, Parcels 9, 10 & 11	P08-0095 00 OF	Final Subdivision	12/26/2008	Regional	Vivian Marsh	Joe Di Marino	
Pine Ridge Crossing	P07-0212	Final Subdivision	12/16/2008	North	Karen Llanes		Jane Elberti
Piney Grove	P07-0148 00 NF	Final Subdivision	12/29/2008	South	Michael Murray	John Bory	Jane Elberti
Popple Property Lots 8-14 Infrastructure	C07-0115-00-NC (G02012944)	SDP	12/24/2008	North	William Love	Claudia O'Keeffe	
Queenstown Forest, Resub of Lot 1	P08-0091 00 NS	Sketch Plan	12/1/2008	South	Dan Beverungen	John Bory	

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Race Road Overlook	C08-0010 00 NC	SDP	12/15/2008	Regional	Courtney Foley	Ernest Larmie	Robert Tyson
Redmond Property	P08-0039 00 NF	Final Subdivision	12/8/2008	South	Michael Murray	John Bory	Michael Mettle
Reecewood Estates	P08-0044 00 NF	Final Subdivision	12/22/2008	South	Michael Murray	John Igbinovia	
Riding Woods, Lot 4	P08-0126 00 NF	Final Subdivision	12/15/2008	Critical Area	Dan Gerzak		
Rite Aid Pharmacy	C08-0013 (G02013316)	SDP	12/11/2008	North	Jeff Torney	Claudia O'Keeffe	
River Glen	P08-0043 00 NS	Sketch Plan	12/22/2008	South	Dan Beverungen	Claudia O'Keeffe	Jane Elberti
Robinson, Allen & Teresa Property	C08-0084 00 NC	SDP	12/22/2008	South	Dan Beverungen	John Bory	Robert Tyson
Rock View Beach, Lots 95-97 Revised	P08-0009	Final Subdivision	12/12/2008	North	oseanne Zimmerma	Emmanuel Kuti	Jane Elberti
Romeo, Joe & Donna	P07-0237 00 NM	Minor Subdivision	12/12/2008	Critical Area	Dan Gerzak	John Bory	
Sabrina Park, Resub of Block U/Clopton Prop.	P08-0086	Sketch Plan	12/5/2008	North	Karen Llanes	Emmanuel Kuti	Jane Elberti
Sahlin Estates	P08-0098 00 NF	Final Subdivision	12/26/2008	South	Kathy Shatt	John Bory	Robert Tyson
Severn Hollow	P07-0084	Final Subdivision	12/11/2008	South	Michael Murray	John Igbinovia	
Severn Industrial Park	C08-0073 00 NC	SDP	12/16/2008	South	Dan Beverungen	John Bory	Michael Mettle
Shaw Commercial Center, Resub of	10161	Modification	12/18/2008	South	Michael Murray	John Igbinovia	Robert Tyson
Shoreland, Plat "A", Lots 3/140 and 157	P08-0108	Final Subdivision	12/8/2008	North	oseanne Zimmerma		
Smiths Marina, 529 Ridgley Road	C08-0089 00 NC	SDP	12/19/2008	Critical Area	Dan Gerzak	John Bassford	Robert Tyson
Solley Heights Lots 46 & 47A	P07-0240 00 NF	Final Subdivision	12/1/2008	North	oseanne Zimmerma	David Obi	Jane Elberti
St. Martins Retreat	MN 10180 (P07-0069)	Modification	12/17/2008	North	Jeff Torney		
Stevens, James & Peggy Property	10153	Modification	12/11/2008	South	Cathy Bridges	John Bory	Robert Tyson
Stoney Run Village	10015A	Modification	12/29/2008	Regional	Vivian Marsh	Joe Di Marino	Robert Tyson
Sumac Fields Addition	P07-0065 00 OF	Final Subdivision	12/16/2008	South	Michael Murray	Emmanuel Kuti	
The Grove @ Sherwood	P06-0158 00 NM	Minor Subdivision	12/22/2008	South	Michael Murray	John Igbinovia	
Thompson Farms, Lot 1A/Reserve Parcel	P07-0183	Final Subdivision	12/5/2008	South	Donna Aulds	John Bory	
Thompson Farms, Lot 27 p/o	P07-0205 00 NF	Final Subdivision	12/8/2008	South	Dan Beverungen	John Bory	
Thompson Farms, Lots 83-85/Noseworthy Prop.	P08-0021 00 NF	Final Subdivision	12/29/2008	South	Dan Beverungen	John Bory	Robert Tyson
Thompson, Hilda Property	F08-015	Modification	12/17/2008	South	Dan Beverungen	John Bory	
Thompson, Hilda Property, Parcel 81	9829A	Modification	12/17/2008	South	Dan Beverungen	John Bory	
Two Rivers PUD Parcel G Phase 1	P07-0252 00 NF	Final Subdivision	12/29/2008	Regional	Vivian Marsh	John Igbinovia	
Uebersax, George & Janet Property	P08-0144 00 NM	Final Subdivision	12/1/2008	Critical Area	Dan Gerzak	John Bassford	Jane Elberti
United Rentals, inc.	C08-0020-00-NC (G02013359)	SDP	12/23/2008	North	William Love	Emmanuel Kuti	

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Vineyard, The/Resub of Lots 7, 11, 12, 17, & 19	P08-0096 00 NS	Sketch Plan	12/22/2008	South	Dan Beverungen	John Igbinovia	
Wade, Russell C. Jr.	P08-0032	Minor Subdivision	12/10/2008	North	Karen Llanes	Emmanuel Kuti	
Walker-Jones Property	P08-0097 00 NM	Minor Subdivision	12/11/2008	South	Donna Aulds	John Bory	
Walton, Robert J. Prop./Resub of Residue C	P07-0039 00 NF	Final Subdivision	12/26/2008	South	Michael Murray	John Bassford	
Ward Farms	P07-0162	Sketch Plan	12/29/2008	North	William Love	Emmanuel Kuti	
Wenger Property, Lot 2	P07-0216	Minor Subdivision	12/15/2008	North	Jeff Tomey	Emmanuel Kuti	
White Rocks Marina	C08-0060 00 NC	SDP	12/16/2008	Critical Area	Dan Gerzak	John Bassford	Jane Elberti
Wilson, John Property, Lot 3A	P07-0224 00 NF	Final Subdivision	12/11/2008	South	Dan Beverungen		
Xu Property	C07-0075 (G02013015)	SDP	12/11/2008	North	Jeff Tomey	Claudia O'Keeffe	

Anne Arundel County Office Of Planning and Zoning

Projects sorted by teams

December 2008

TEAM Critical Area

Project Name	*Number*	*Type*	*Due Date*	*Planner*	*Engineer*	*Traffic*
Carrollton Manor, Lots 49-51 Blk. 1/Seerey Prop.	P07-0034 00 NF	Final Subdivision	12/11/2008	Thomas Burke	John Bassford	Jane Elberti
Carvel Beach/Leitz Property	10169	Modification	12/4/2008	Vanessa Crankfield		
Citrano/Huffard Prop. Parcel 2	10129	Modification	12/1/2008	Dan Gerzak	Rania Carriker	Jane Elberti
Durner Family Property	P08-0047 00 NM	Minor Subdivision	12/15/2008	Dan Gerzak	Claudia O'Keeffe	
Glen Burnie Crossing	10167	Modification	12/4/2008	Thomas Burke	John Bassford	
Green Haven - Armiger Addn., Lots 1-28, Blk M	C07-0109 00 NC	SDP	12/24/2008	Dan Gerzak	Claudia O'Keeffe	
Gutsche, Graham Prop./Resub of Lot 2R	10165	Modification	12/24/2008	Dan Gerzak		
Gutsche, Graham Property/Resub Lot 2R	P08-0076 00 NM	Final Subdivision	12/18/2008	Dan Gerzak	John Bassford	
Hidden View Farm	P07-0156 00 NS	Sketch Plan	12/11/2008	Thomas Burke	John Bassford	
Johnson, Leslie R. Property	P08-0004 00 NF	Final Subdivision	12/26/2008	Dan Gerzak	John Bory	
Kawecki Property near Dreams Landing	P08-0150 00 NM	Final Subdivision	12/11/2008	Thomas Burke	John Bassford	Robert Tyson
Knox, June C. Property	10135	Modification	12/10/2008	Thomas Burke		
Lamons Landing	P07-0219 00 NS	Sketch Plan	12/26/2008	Thomas Burke	David Obi	Jane Elberti
Longshoremans Pl A, Lots 1, 2R, 4R, 5/Woodberry	P07-0106 00 NF	Final Subdivision	12/8/2008	Dan Gerzak		
Mangee Property	P08-0045 00 NS	Sketch Plan	12/8/2008	Donna Aulds	Claudia O'Keeffe	
MS06-047	MS06-047	Minor Subdivision	12/10/2008	Thomas Burke		
Riding Woods, Lot 4	P08-0126 00 NF	Final Subdivision	12/15/2008	Dan Gerzak		
Romeo, Joe & Donna	P07-0237 00 NM	Minor Subdivision	12/12/2008	Dan Gerzak	John Bory	
Smiths Marina, 529 Ridgley Road	C08-0089 00 NC	SDP	12/19/2008	Dan Gerzak	John Bassford	Robert Tyson
Uebersax, George & Janet Property	P08-0144 00 NM	Final Subdivision	12/1/2008	Dan Gerzak	John Bassford	Jane Elberti
White Rocks Marina	C08-0060 00 NC	SDP	12/16/2008	Dan Gerzak	John Bassford	Jane Elberti

Anne Arundel County Office Of Planning and Zoning

Projects sorted by teams

December 2008

TEAM North

Project Name	*Number*	*Type*	*Due Date*	*Planner*	*Engineer*	*Traffic*
A.A. County -DPW Central Sanitation Facility	MN 10168 (G02012345)	Modification	12/4/2008	William Love	Emmanuel Kuti	
Archdiocese of Baltimore/Dorsey Road	P08-0115	Final Subdivision	12/11/2008	Brandy Vos	David Obi	
Belle Grove Inn Assoc, LLC Resub of Reserve Par.	P08-0040-00-NF	Final Subdivision	12/22/2008	Roseanne Zimmerman	David Obi	
Cambria Suites Hotel	C08-0065 (G02013603)	SDP	12/15/2008	Jeff Torney	Claudia O'Keeffe	Jane Elberti
Carvel Beach p/o Lot 132/Bridgewater at	P06-0100	Final Subdivision	12/15/2008	Jeff Torney		
Chipolte@Severna Park Mall/Five seven Five (575) Ritchie Hwy	MN 10171 (C08-0094, B02251683)	Modification	12/10/2008	Karen Llanes	Claudia O'Keeffe	
Dailey, Loraine Property	10178	Modification	12/17/2008	Dan Gerzak		
Dorchester View	MN 10143 (C08-0014)	Modification	12/4/2008	Jeff Tomey	Claudia O'Keeffe	Jane Elberti
Dorchester View	MN 10143 (P08-0154)	Modification	12/4/2008	Jeff Torney	Claudia O'Keeffe	Jane Elberti
Dorchester View	C08-0014	SDP	12/17/2008	Jeff Torney	Claudia O'Keeffe	Jane Elberti
Easi Landing	C08-0061-00-NC (G02013584)	SDP	12/24/2008	Roseanne Zimmerman	David Obi	Jane Elberti
Eighty Three Hundred Ritchie Highway	C08-0088-00-NC (G02013706)	SDP	12/11/2008	William Love	Claudia O'Keeffe	Jane Elberti
Extra Space Storage of Pasadena	MN 10189 (C07-0104-01)	Modification	12/24/2008	William Love		
Fifteen Hundred Twenty five Dorsey Road	C05-0040-03-NC (G02011655)	SDP	12/24/2008	William Love	David Obi	Jane Elberti
Foxwell, Eliz Subdivision Lot 4/Bosse	P07-0127	Minor Subdivision	12/18/2008	Jeff Torney	Emmanuel Kuti	
Gerard Park	P07-0100	Final Subdivision	12/9/2008	Karen Llanes	Emmanuel Kuti	
Glenn, Annie Subdivision, Lot 4	P08-0155	Minor Subdivision	12/29/2008	William Love	Emmanuel Kuti	Jane Elberti
Howards Farm Lot 4	P07-0186	Minor Subdivision	12/8/2008	Karen Llanes		
Johnson Farm, East half of Lot 6	P08-0012	Final Subdivision	12/12/2008	Brandy Vos	Emmanuel Kuti	Jane Elberti
Linthicum heights/Kromminga Prop. 5805 Marydel Rd.	MN 9834A (P08-0013)	Modification	12/18/2008	Karen Llanes	Claudia O'Keeffe	
Lowes of Glen Burnie, Garden Center Expansion	C08-0062 (G02013490, B02249453)	SDP	12/11/2008	Brandy Vos	Emmanuel Kuti	Jane Elberti
Margate Lot 178 p/o	P08-0140	Final Subdivision	12/8/2008	Karen Llanes	David Obi	Jane Elberti
McDonalds Restaurant, 719 Nursery Road	C08-0059 (G02013572)	SDP	12/10/2008	Brandy Vos	David Obi	Jane Elberti
McDonalds Restaurant, 7415 Ritchie Hwy.	C08-0090-00-NC (G02013717)	SDP	12/22/2008	Brandy Vos	Claudia O'Keeffe	Jane Elberti

Anne Arundel County Office Of Planning and Zoning
Projects sorted by teams
December 2008

Middlebury Addition	P07-0233-00-NF	Final Subdivision	12/22/2008	Jeff Torney	David Obi	Jane Elberti
Middlebury Addition	P07-0233-00 NF	Final Subdivision	12/22/2008	Jeff Torney	David Obi	Jane Elberti
Northpark	MN 10181 (P07-0094)	Modification	12/17/2008	William Love		
Pine Ridge Crossing	P07-0212	Final Subdivision	12/16/2008	Karen Llanes		Jane Elberti
Popple Property Lots 8-14 Infrastructure	C07-0115-00-NC (G02012944)	SDP	12/24/2008	William Love	Claudia O'Keeffe	
Rite Aid Pharmacy	C08-0013 (G02013316)	SDP	12/11/2008	Jeff Torney	Claudia O'Keeffe	
Rock View Beach, Lots 95-97 Revised	P08-0009	Final Subdivision	12/12/2008	Roseanne Zimmerman	Emmanuel Kuti	Jane Elberti
Sabrina Park, Resub of Block U/Clopton Prop.	P08-0086	Sketch Plan	12/5/2008	Karen Llanes	Emmanuel Kuti	Jane Elberti
Shoreland, Plat "A", Lots 3/140 and 157	P08-0108	Final Subdivision	12/8/2008	Roseanne Zimmerman		
Solley Heights Lots 46 & 47A	P07-0240 00 NF	Final Subdivision	12/1/2008	Roseanne Zimmerman	David Obi	Jane Elberti
St. Martins Retreat	MN 10180 (P07-0069)	Modification	12/17/2008	Jeff Torney		
United Rentals, inc.	C08-0020-00-NC (G02013359)	SDP	12/23/2008	William Love	Emmanuel Kuti	
Wade, Russell C. Jr.	P08-0032	Minor Subdivision	12/10/2008	Karen Llanes	Emmanuel Kuti	
Ward Farms	P07-0162	Sketch Plan	12/29/2008	William Love	Emmanuel Kuti	
Wenger Property, Lot 2	P07-0216	Minor Subdivision	12/15/2008	Jeff Torney	Emmanuel Kuti	
Xu Property	C07-0075 (G02013015)	SDP	12/11/2008	Jeff Torney	Claudia O'Keeffe	

Anne Arundel County Office Of Planning and Zoning

Projects sorted by teams

December 2008

TEAM Regional

Project Name	*Number*	*Type*	*Due Date*	*Planner*	*Engineer*	*Traffic*
Arundel Preserve Infra Phase 2, Par 9A, 10B & Open Space	P07-0217 01 NF	Final Subdivision	12/15/2008	Courtney Foley	Ernest Larmie	
Arundel Preserve, Town Center at	C08-0032 00 NC	SDP	12/3/2008	Courtney Foley		
Arundel Preserve, Town Center at	M#9921	Modification	12/3/2008	Courtney Foley	Ernest Larmie	
Arundel Preserve, Town Center at	F08-006	Modification	12/3/2008	Courtney Foley	Ernest Larmie	
Arundel Preserve/The Enclave @ Ph 2 Parcel 10A, Sec 2	P07-0147 00 OF	Final Subdivision	12/1/2008	Courtney Foley	Joe Di Marino	
Cedar Hill PUD	10164	Modification	12/3/2008	Vivian Marsh		
Loretta Heights Lots 1-18, Blk B/Parole Office Building	C07-0088 00	SDP	12/22/2008	Courtney Foley	Joe Di Marino	Robert Tyson
Loretta Heights Lots 1-18, Blk. B/Parole Office Building	P2007-0184	Final Subdivision	12/22/2008	Courtney Foley	Joe Di Marino	Robert Tyson
National Bus. Pk, BGE Guilford Road Substation	C08-0091 00 NC	SDP	12/24/2008	Courtney Foley	Joe Di Marino	Robert Tyson
National Business Park/Resub. Of Lots 21R-32RR	P08-0063 00 NF	Final Subdivision	12/8/2008	Courtney Foley		
Odenton Business Park, Lot 4	C08-0066 00 NC	SDP	12/10/2008	Vivian Marsh	Ernest Larmie	Robert Tyson
One Hundred Nine Five Admiral Cochrane Drive	C08-0031 00 NC	SDP	12/5/2008	Courtney Foley		Robert Tyson
One Hundred Ninety Five Admiral Cochrane Drive	M#9915	Modification	12/5/2008	Courtney Foley		
Parkside Phase 2 Infrastructure	P07-0067 00 0F	Final Subdivision	12/5/2008	Vivian Marsh	Joe Di Marino	
Parkside Phs 3B, Parcels 9, 10 & 11	P08-0095 00 OF	Final Subdivision	12/26/2008	Vivian Marsh	Joe Di Marino	
Race Road Overlook	C08-0010 00 NC	SDP	12/15/2008	Courtney Foley	Ernest Larmie	Robert Tyson
Stoney Run Village	10015A	Modification	12/29/2008	Vivian Marsh	Joe Di Marino	Robert Tyson
Two Rivers PUD Parcel G Phase 1	P07-0252 00 NF	Final Subdivision	12/29/2008	Vivian Marsh	John Igbinovia	

Anne Arundel County Office Of Planning and Zoning

Projects sorted by teams

December 2008

TEAM South

Project Name	*Number*	*Type*	*Due Date*	*Planner*	*Engineer*	*Traffic*
Arundel Bay Christian Academy at Felgenhauer Prop.	P08-0114 00 NM	Final Subdivision	12/26/2008	Kathy Shatt	John Bassford	
Arundel Bay Christian Academy at Felgenhauer Prop.	10041 & 10041A	Modification	12/17/2008	Kathy Shatt	John Bassford	Robert Tyson
Baldwin Manor Phase 2	P06-0116	Minor Subdivision	12/11/2008	Michael Murray		
Barr, Edward & Mary	MS04-136	Minor Subdivision	12/9/2008	Michael Murray		
Bias, Harvey	MS05-023	Minor Subdivision	12/15/2008	Kathy Shatt	John Bory	
Boat Lifts Unlimited	C07-0119 00 NC	SDP	12/4/2008	Kathy Shatt	John Igbinovia	
Boatlifts Unlimited	10154	Modification	12/4/2008	Kathy Shatt		
Bountys View Residue/Lords Bounty @	P08-0156 00 NF	Final Subdivision	12/29/2008	Cathy Bridges		
Burkes Choice	P08-0113 00 NS	Sketch Plan	12/16/2008	Dan Beverungen	John Bory	
Clifford, Matthew Property	P06-0145	Final Subdivision	12/5/2008	Dan Beverungen	John Bory	
Crofton II Condo Lot 1 Resub	P07-0144 00 NF	Final Subdivision	12/22/2008	Cathy Bridges		
Crofton South, Lot 1	P08-0089 00 NF	Final Subdivision	12/5/2008	Donna Aulds	John Bory	Robert Tyson
Deer Run Hollow (Amended Plat)	P08-0120 00 NF	Final Subdivision	12/15/2008	Cathy Bridges		
East Park Center Res Parcel/Microtel Inn & Suites	P07-0239 00 NF	Final Subdivision	12/29/2008	Dan Beverungen	John Bory	
Four Eleven College Parkway	10151	Modification	12/10/2008	Dan Beverungen		
Grierson, Joan Property	MS04-111	Minor Subdivision	12/20/2008	Michael Murray		
Griffith Landing	10139	Modification	12/3/2008	Michael Murray	John Igbinovia	Robert Tyson
Griffith Landing	P07-0083 00 NF	Final Subdivision	12/5/2008	Michael Murray	John Igbinovia	
Hawthorne Ridge Farms, Lot 4R Resub.	P04-0198 00 OM	Final Subdivision	12/16/2008	Kathy Shatt	John Bory	
Howlins Choice, Lot 2 Revised	P08-0066 00 NM	Final Subdivision	12/20/2008	Cathy Bridges		
Jacobs Forest	P05-0151 00 NF	Final Subdivision	12/16/2008	Michael Murray	John Igbinovia	Michael Mettle
Kuczinski Property, Lot 25	P08-0015 00 NF	Final Subdivision	12/15/2008	Dan Beverungen		
Lakemont Memorial Gardens	C08-0024 00 NC	SDP	12/15/2008	Dan Beverungen	John Bory	
Linpro Harmans Property, Lot 4	C08-0046 00 NC	SDP	12/19/2008	Dan Beverungen	John Igbinovia	
Mid-Atlantic Community Church	C08-0063 00 NC	SDP	12/5/2008	Michael Murray	John Bory	Michael Mettle
Piney Grove	P07-0148 00 NF	Final Subdivision	12/29/2008	Michael Murray	John Bory	Jane Elberti
Queenstown Forest, Resub of Lot 1	P08-0091 00 NS	Sketch Plan	12/1/2008	Dan Beverungen	John Bory	
Redmond Property	P08-0039 00 NF	Final Subdivision	12/8/2008	Michael Murray	John Bory	Michael Mettle
Reecewood Estates	P08-0044 00 NF	Final Subdivision	12/22/2008	Michael Murray	John Igbinovia	
River Glen	P08-0043 00 NS	Sketch Plan	12/22/2008	Dan Beverungen	Claudia O'Keeffe	Jane Elberti

Anne Arundel County Office Of Planning and Zoning
Projects sorted by teams
December 2008

Robinson, Allen & Teresa Property	C08-0084 00 NC	SDP	12/22/2008	Dan Beverungen	John Bory	Robert Tyson
Sahlin Estates	P08-0098 00 NF	Final Subdivision	12/26/2008	Kathy Shatt	John Bory	Robert Tyson
Severn Hollow	P07-0084	Final Subdivision	12/11/2008	Michael Murray	John Igbinovia	
Severn Industrial Park	C08-0073 00 NC	SDP	12/16/2008	Dan Beverungen	John Bory	Michael Mettle
Shaw Commercial Center, Resub of	10161	Modification	12/18/2008	Michael Murray	John Igbinovia	Robert Tyson
Stevens, James & Peggy Property	10153	Modification	12/11/2008	Cathy Bridges	John Bory	Robert Tyson
Sumac Fields Addition	P07-0065 00 OF	Final Subdivision	12/16/2008	Michael Murray	Emmanuel Kuti	
The Grove @ Sherwood	P06-0158 00 NM	Minor Subdivision	12/22/2008	Michael Murray	John Igbinovia	
Thompson Farms, Lot 1A/Reserve Parcel	P07-0183	Final Subdivision	12/5/2008	Donna Aulds	John Bory	
Thompson Farms, Lot 27 p/o	P07-0205 00 NF	Final Subdivision	12/8/2008	Dan Beverungen	John Bory	
Thompson Farms, Lots 83-85/Noseworthy Prop.	P08-0021 00 NF	Final Subdivision	12/29/2008	Dan Beverungen	John Bory	Robert Tyson
Thompson, Hilda Property	F08-015	Modification	12/17/2008	Dan Beverungen	John Bory	
Thompson, Hilda Property, Parcel 81	9829A	Modification	12/17/2008	Dan Beverungen	John Bory	
Vineyard, The/Resub of Lots 7, 11, 12, 17, & 19	P08-0096 00 NS	Sketch Plan	12/22/2008	Dan Beverungen	John Igbinovia	
Walker-Jones Property	P08-0097 00 NM	Minor Subdivision	12/11/2008	Donna Aulds	John Bory	
Walton, Robert J. Prop./Resub of Residue C	P07-0039 00 NF	Final Subdivision	12/26/2008	Michael Murray	John Bassford	
Wilson, John Property, Lot 3A	P07-0224 00 NF	Final Subdivision	12/11/2008	Dan Beverungen		

Exhibit E
Procedures for Turnover of Stormwater Management Facilities to the Department of Public Works

ANNE ARUNDEL COUNTY
MARYLAND

DEPARTMENT OF INSPECTIONS AND PERMITS
2664 Riva Road, Annapolis, MD 21401
Telephone: (410) 222-7790
Fax: (410) 222-7970

Interoffice Memo

To: Environmental Programs Staff
Administrative Staff

From: John P. Peacock Sr., Environmental Code Administrator

Date: June 12, 2006

Subject: Policy & Procedure
Completing Grading Permits with Public Stormwater Management

The purpose of this Policy and Procedure is to formally revise the previous procedures for completing grading permits that include any PUBLIC stormwater management devices.

Background
SWM devices are either publicly maintained in which case they are considered PUBLIC or privately maintained in which case they are considered PRIVATE. Private SWM devices are subject to a Stormwater Inspection & Maintenance Agreement, recorded against the property deed, which makes the property owner responsible for long-term maintenance. Public SWM devices are either located on County owned property or within a maintenance easement and are maintained by the Department of Public Works, the Department of Recreation & Parks, the Department of Central Services or the Anne Arundel County School Board. Accordingly it is necessary that all Public SWM devices are properly completed and the appropriate agency be notified of their responsibility for long term maintenance.

Public SWM Devices Maintained by DPW
The typical SWM devices maintained by DPW are ponds, infiltration trenches and Bio-Retention devices receiving runoff from County roads in single-family residential subdivisions. These SWM devices are typically built by developers and when completed are turned over to DPW for long-term maintenance. The DPW-Infrastructure Management Division maintains these types of Public devices. The following procedure is to be used when completing grading permits with Public SWM devices to be maintained by DPW:

1. Just prior to conducting the Final Inspection for a grading permit including any Public SWM devices to be maintained by DPW, the Erosion Control Inspector is to contact Mr. Richard Olsen at X-7190 and invite him to a joint evaluation of the public SWM device(s). The purpose of the joint evaluation is to obtain DPW's comments so any concerns can be addressed with the permittee during the Final Inspection.

2. After the joint meeting the Erosion Control Inspector is to review any DPW comments with their assigned supervisor and proceed accordingly.
3. When the Erosion Control Inspector turns in the file and the Certificate of Completion to the Erosion Control Supervisor, the Erosion Control Supervisor must notify Mr. Olsen and forward him a copy of the as-built plans, any SWM calculations and any relevant reports
4. By agreement between the Directors of I&P and DPW, the long-term maintenance inspection responsibilities for DPW maintained SWM devices is now the responsibility of DPW. Accordingly upon the issuance of a Certificate of Completion for a grading permit with a DPW maintained SWM device, the administrative staff may archive the grading permit file.
5. **Exception**-An increasing number of grading permits includes both Public and Private SWM devices. Grading permits with both Public and Private SWM will also have a Stormwater Inspection & Maintenance Agreement and the administrative staff must arrange to have these files imaged.

Public SWM Devices NOT Maintained by DPW

Public SWM devices not in a single family residential subdivision are typically not maintained by DPW and are the maintenance responsibility of another County department or agency. For example, SWM devices serving public schools are maintained by the Board of Education and I&P remains responsible for conducting maintenance inspections as per the State and County SWM Codes.

- Accordingly for Public SWM Devices NOT maintained by DPW the administrative staff must have these files imaged and the files are to be maintained as if they had a Stormwater Inspection & Maintenance Agreement.

Exhibit F
Excerpt from Anne Arundel County Stormwater BMP Database

Anne Arundel County, Maryland | Citizens Information Center

Storm Water Management Data Edit Permit Form

Storm ID #:	9795	
Structure #:	99999	
Permit #:	G02012505	BXXXXXXXX where B is building or G is grading, XXXXXXXX is a number.
Tax Account #:		Do not use hyphens.
Structure Name	Holladay Park Estates	
Device Name:	Pond 1	
Small Pond Code:	2219	
Street Address:	Holladay Park Ave	
Zip and City:	21054-Gambrills	
State	MD	
MD North:	507880	MD North must be entered in NAD83 Feet. (MIN:379500 - MAX
MD East:	1409911	MD East must be entered in NAD83 Feet. (MIN:1355100 - MAX
ADC Map:	13E07	ADC MAP example format [illegible]
NEW ADC Map:		NEW ADC MAP example format [illegible]
Watershed:	239 - SEVERM sub MIDDLE SEVERN RIVER	
SBASIN #:	02131002	
Structure Type:	Wet ED Pond	
Land Use:	Low Density Residential	
Drain Area:	17.9	
TOT Drain:	17.9	
Approval Date:	12/03/2007	MM/DD/YYYY
Built Date:		MM/DD/YYYY
Last Change Date:	11/24/2008	MM/DD/YYYY
Ownership:	DPW-IM	
ONSITE:	Yes	
RCN:	68	
Main Inspection Date:		MM/DD/YYYY

General Comments:

Qp & CpV

Memo:

Save Record | Return to Listing | Print Record | Back to Main Menu

Exhibit G
Example Request for Investigation form

ANNE ARUNDEL COUNTY
MARYLAND
County Executive John R. Leopold

Environmental Programs Division
Department of Inspections and Permits
2664 Riva Road, Annapolis, MD 21401
Telephone: (410) 222-7780
Fax: (410) 222-7970
www.aacounty.org

Request For Investigation

This form is to be used for all suspected violations of the Building, Grading and Sediment Control, and Zoning Codes. The address or tax account number of the property is required for investigation.

Date: 12-4-08 Date of suspected violation: 12-4-08

Property address: JACOBSVILLE ELEM SCHOOL City: PASADENA

Tax account number if address not known: ____-___-___

Property owner (if known): AA BOARD OF EDUCATION

Name/Company committing violation (other than property owner): _____

Complainant's name and address* (optional): JOEL WHITE

Complainant's telephone number* (optional): 410-437-2751

Violation Type: Please indicate suspected violation type and give details below

Building	Grading and Sediment Control	Zoning
☐ Addition, no permit ☐ Shed, no permit ☐ Deck, no permit ☐ Building out of scope of permit ☐ Other	☐ Grading without a permit ☐ Sediment controls down/missing ☐ Removing trees or vegetation, critical area ☐ Tree clearing, not in critical area ☒ Other	☐ Unregistered vehicle ☐ Junk and debris ☐ Commercial vehicle in residential area ☐ Commercial business in residential area ☐ Other

Details: SWM POND GATES NOT LOCKED AND HINGES BROKEN. INSPECTOR TO CALL

To check on the status of the investigation, go to http://www.aacounty.org/IP and click on Compliance Case Database or call: Building 410-220-7746; Grading 410-222-7780; Zoning 410-222-7446. Please allow 2-3 weeks before calling for status.

* In accordance with the Freedom of Information Act, all correspondence, including this compliant, may be considered public information and available for public view.

recd
From
J. Peacock

Exhibit H
Excerpt from the Inspections and Permits Compliance Database

Inspections & Permits

ENVIRONMENT

I&P Compliance Cases

Menu | | Help?

Start > Browse By > Browse > **Display Complaint**

Case ID:	E-2007-0357	**Location:**	7975 CRAIN HWY
Tax ID:	3000-3012-6200		GLEN FOREST SR APT - GLEN BURNIE, 21061
Received:	04/26/2007		
Tickler:		**Complaint:**	General complaint/information needed
Completed:	06/01/2007		

CLS	JB	04/26/2007	- -			No	No
Receiver	Inspector	Date Assigned	Corresponding Cases	Permit Number	Original ID	Waterfront	Critical Area

Case Details | **Events** **Add New Event**

	Date	Event	Due Date	Request for Trial Date
1.	**04/26/2007**	**Opened Complaint Case**	**05/10/2007**	

Sediment pond is filled with algae, trash and reeds. Please send an inspector to investigate.

2. **05/09/2007** **Case Note** Delete **05/09/2007**

JPP IS PREPARING TO SEND A SWM NOTICE OF DIFFICIENCIES TO THE PROPERTY OWNER. A COPY OF THE NOTICE WILL BE EARMARKED FOR THE FILE.

3. **06/01/2007** **Close Complaint** Delete **06/01/2007**

Please close out this complaint. Jay did an inspection on 5-31-07 and confirmed all the required maintenance repairs were made. I need to keep the inspection reports because I need to speak to the Asst Director about getting them into the imaged files.

reid from J. Peacock

Exhibit I
Interoffice Memos Outlining Compliant Processing Procedures

ANNE ARUNDEL COUNTY
MARYLAND

DEPARTMENT OF INSPECTIONS AND PERMITS
2664 Riva Road, Annapolis, MD 21401
Telephone: (410) 222-7790
Fax: (410) 222-7970

Interoffice Memo

To: Administrative & Erosion Control Staff

From: John P. Peacock Sr., Environmental Code Administrator

Date: May 17, 2006

Subject: Complaint Processing

The following guidelines are to be used in the processing of all Environmental Complaints.

Environmental complaints are to be classified as either Permitted or non-Permitted and either Critical Area or non-Critical Area in accordance with the following criteria:

1) Permitted Complaints
To be classified as a Permitted complaint, one of the following conditions must exist:

- An issued grading permit for which there is no completion date in PIP's
- An issued grading permit that has been complete for less then 1 year
- An issued building permit less then 3 years old for which there is no completion date in PIP's
- Issued building permits for new additions and new structures that have been complete for less then 1 year.
- A pending Tank permit less then 2 years old
- An approved Standard Grading Plan less then 2 years old
- A Buffer/Vegetation Management Plan approved by the County Forester

2) non-Permitted Complaints
Any complaint not classified as a Permitted complaint shall be classified as non-Permitted including:

- Building permits for interior renovations
- Trade permits (plumbing, mechanical, electrical....etc)

3) Critical Area
All complaints within the Chesapeake Bay Critical Area shall be classified as Critical Area

4) non-Critical Area
All complaints not within the Chesapeake Bay Critical Area shall be classified as non-Critical Area

rec'd from
J. Roscoe

Complaints are to be assigned as follows:

5) The following complaints shall be assigned to the Area Erosion Control Inspectors

- All Permitted complaints
- All non-Permitted/non-Critical Area Complaints except as noted under item 7

6) The following complaints shall be assigned to Erosion Control Inspector, Gene Patterson

- All non-Permitted/Critical Area complaints except as noted under item 7

7) The following complaints shall be assigned to Erosion Control Inspector Steve Trumpler

- All complaints involving the proper operation and maintenance of existing stormwater management devices

It is understood that due to workload issues and the use of leave benefits, a complaint may need to be assigned outside these guidelines. It is also understood that assigned inspector may find some complaints were improperly assigned because of incomplete information provided by the complainant. Accordingly once a complaint is assigned, the inspector assigned to the complaint must perform an initial inspection and prepare a written inspection report on the lap top computer. If a violation exists the inspector shall issue a Stop Work Order and require any necessary sediment controls including temporary stabilization. Further decisions on enforcement, follow up and the possible reassignment to another inspector shall be made in the office after screening the violation with the appropriate supervisor or manager.

ANNE ARUNDEL COUNTY
MARYLAND

DEPARTMENT OF INSPECTIONS AND PERMITS
2664 Riva Road, Annapolis, MD 21401
Telephone: (410) 222-7790
Fax: (410) 222-7970

Interoffice Memo

To: Infrastructure & Environmental Programs Staff

From: John P. Peacock, Sr., Environmental Code Administrator

Date: January 18, 2008

Subject: Permitted and Non-Permitted Complaint Processing

The following revised procedures are to be followed in the investigation and enforcement of any complaints assigned to the Infrastructure & Environmental Programs inspection staff.

1. Inspectors and supervisors are not to return improperly assigned non-permit complaints back to the administrative staff for reassignment to the Code Compliance Division.

2. Inspectors are to conduct inspections and prepare written inspection reports for all complaints assigned to them regardless if it's a permitted or non-permitted complaint. The inspection reports shall be hand written on the Environmental Programs Inspection Report form or typed on the standard computer inspection report form.

3. Separate written inspection reports are required for each inspection performed including the initial investigation, follow up inspections and the final inspection.

4. The written inspection reports are to be turned in to the assigned administrative staff person responsible for the Compliance Database upon their completion and review by the supervisor. Inspection reports are not to be held by the inspector and turned in all at once when the complaint is closed.

5. The written report must detail the observations made by the inspector with respect to the complaint. It is not acceptable to just report "No Violations Observed" or substitute the required written report with hand written notes on the Complaint Sheet.

6. Any grading or critical area violations found on a permitted or non-permitted site are to be enforced by the issuance of a Stop Work Order and the immediate mitigation of the violation by sediment controls and stabilization.

7. For permitted sites the inspection reports are to be reviewed by the supervisor and if acceptable, a copy of the report must be turned in to the assigned administrative staff

rec'd from
J. Peacock

person responsible for updating the Compliance Database. Further enforcement will stay with Infrastructure & Environmental Programs and follow the established procedures.

8. For non-permitted sites the inspection reports are to be reviewed by the supervisor and if acceptable, referred to the Environmental Code Administrator for transfer to the Code Compliance Division for further enforcement.

9. Should an inspector observe a non-permit or potential non-permit violation during the course of the working day, they are to conduct an inspection and prepare a written report. If a grading or Critical Area violation exists, inspectors are to enforce the violation by the issuance of a Stop Work Order and the immediate mitigation of the violation by sediment controls and stabilization. The inspection reports are to be reviewed by the supervisor and if acceptable, referred to the Environmental Code Administrator for transfer to the Code Compliance Division for further enforcement.

Exhibit J
River Oaks Stormwater Management Follow-up Inspection Report

ANNE ARUNDEL COUNTY
MARYLAND

Department of Inspections and Permits
2664 Riva Road, Annapolis, MD 21401
Telephone: (410) 222-7790
Fax: (410) 222-7970
www.aacounty.org

INTEROFFICE CORRESPONDENCE

TO: Lisa A. Biddle, P.E.
EGR

FROM: John P. Peacock, Code Enforcement Administrator
Department of Inspections & Permits

DATE: May 14, 2009

SUBJECT: EPA Audit of MS-4 Permit
River Oaks Stormwater Management Inspection Report

As requested, enclosed is a copy of the River Oaks Stormwater Management Inspection Report. A portion of the required work still needs to be performed and Stormwater Management Maintenance Inspector, Dave McNicholas is currently working with the new Home Owners Association members to complete the remaining work. Should you have any questions, Please feel free to contact me at 410-222-7763..

CC: Janis Markusic
Ginger Ellis
JP Reader File
Cron

ANNE ARUNDEL COUNTY
MARYLAND

Department of Inspections and Permits
Heritage Office Complex
2664 Riva Road
Annapolis, MD 21401
410-222-7780

Infrastructure and Environmental Programs Inspection Report

To Contact this Inspector, Telephone: 40-222-7768

Inspection Date: 12/10/2008 **TIME:** 1024 **PERMIT** G02008876 **SWMA:** 4398

AASCD Name: 462-29

OWNER/Permitee Name: Landings at River Oaks HOA

Address: 7250 Parkway Dr. Suite 520 **CITY:** HANOVER **STATE:** MD **ZIP:** 21076

Location: Two Rivers Dr. Landings at River Oaks

Inspection Type: Storm Water Maintenance

Inspection Results: Not In Compliance

Corrective Action Taken:

12/10/2008	Issue Non-Compliance Notice
5/14/2009	Issue Non-Compliance Notice

This maintenance inspection was conducted to ensure that the Storm Water Management (SWM) pond and/or device is being maintained in accordance with Article 16 Sec;3-404 (SWM Ordinance) and the terms of the SWM agreement #4398 Tax #1454-9021-3755 Small Pond #
1.Fence needs to be stapled to posts in several areas through out pond.
2. Remove landscape debris near gate.
3. More straw needed on open ground where landscaping was done.
4.The Anne Arundel County Soil Conservation District requires that all Constructed Dam Embankments be free from woody vegatation from top to bottom on interior and exterior and mowed 2 times a year.
Cut to a height of 6"and remove all vegatation within 25'ft.of riser structure/outfall and inflow devices.
Complete by 6-13-09
Failure to comply with this Correction Notice may result in Civil Citations and/or future civil action by the county.
Must use sediment and erosion control devices when needed to prevent sediment from leaving site during repairs.
Stabilization with seed and straw and/or erosion matting with in seven days of any ground disturbance and/or open ground.
Call if field meeting is needed prior to work.
Call for re-inspection when completed.Additional items may be revealed after above work is done.
CC;mailed 12-11-08 Remailed;5-14-09

Received By: _____

I hearby acknowledge of this report by my signature which does not imply agreement or disagreement with its content.

Inspector: DAVE MCNICHOLAS

Exhibit K
Anne Arundel County's 2007 Illicit Discharge Documentation

ANNE ARUNDEL COUNTY
MARYLAND

DEPARTMENT OF INSPECTIONS AND PERMITS
2664 Riva Road, Annapolis, MD 21401
Telephone: (410) 222-7790
Fax: (410) 222-7970

Interoffice Memo

INTEROFFICE CORRESPONDENCE

TO: Max Kuker, PG Environmental LLC

Through: Ginger Ellis, Program Manager
Department of Public Works

FROM: John P. Peacock, Code Enforcement Administrator
Department of Inspections & Permits

DATE: December 19, 2008

SUBJECT: Anne Arundel County MS-4 NPDES Permit Audit
2007 Illicit Connection Investigation Results

This memo serves to follow up on the Illicit Connection Investigation information requested at the recent EPA audit of the County's MS-4 NPDES Permit. For 2007 the Department received seven referrals as a result of the random monitoring of various stormdrains within the County. I have enclosed all the paperwork for the various files. The referrals were as follows.

- Four (4) involved vehicle washing operations at three (3) new vehicle dealerships and one (1) vehicle maintenance yard
- One (1) involved an eroded outfall at vehicle raceway operation
- One (1) involved leaking dumpsters at a seafood sales operation
- One (1) involved a concrete production operation

Vehicle Washing Operations
The four vehicle washing operations were inspected and the operation at the Patuxent Companies was found to have installed a new recycling washing system since the time of the random monitoring. As such no violation was found on this site. However the vehicle washing operations at Tischer Nisson, Tischer Acura and Ourisman Honda/VW had no such treatment for the washwater. These operations are covered under Standard Industrial Code Number (SIC) 5511 and are subject to coverage under the Maryland Genaral NPDES Permit for Industrial Site Runoff. In accordance with Condition III.E.3.d. of the MS-4 permit issued to the County, these 3 violations were referred to area Maryland Department of the Environment Compliance Inspector Nadine St Parrie-Charles for further enforcement. Once referred to the MDE inspector, the Department considered the files to be closed with no further action required.

Raceway Operation
This was not an illicit connection situation, but; a potential sediment pollution violation of the Title 4 of the Maryland Environmental Act. The operator of the raceway also operates a large surface mining operation that shares outfalls with the raceway. Since the State Code precludes the local jurisdictions from enforcing sediment pollution or potential surface mining violations, the

matter was referred to area MDE Environment Compliance Inspector Nadine St Parrie-Charles for further enforcement.

Seafood Operation
Shoreline Seafood is a food service operation that has SIC# 2092 and is subject to the Maryland Food Service Code. The matter of the seafood waste leaking from the dumpsters was discussed with the County Sanitarian Office of the Anne Arundel County Health Department. Since the leaking dumpsters were subject to the Maryland Food Service Code, the Health Department indicated their preference that they handle the matter of the leaking dumpsters, seafood odors and potential outside storage violations. Accordingly the Department considered the matter to be closed with no further action required.

Concrete Operation
The concrete batch plant at Aggregate Industries did have coverage under the Maryland General Permit for Industrial Site Runoff and an approved Pollution Prevention Plan. There was also a stormwater management pond on the site that required maintenance. The Department took enforcement action to correct the maintenance deficiencies at the stormwater pond. After discussing the violation of the Pollution Prevention Plan with MDE Enforcement Division Chief, Heather Nelson, the matter was formally referred to MDE via letter of November 30, 2007 from me to Ms. Nelson. Accordingly the Department considered the matter to be closed with no further action required.

2008 Illicit Connections
For 2008 the Department received 11 Illicit Connection referrals from DPW. As agreed all the referrals were logged into the Department Complaint/Compliance Database and can be tracked over the Internet. The compliance file numbers are as follows:

- E-2008-0930, Marley Station Mall, stormwater management pond maintenance needed
- E-2008-0931, Severna Park Exxon, automotive fluids washing off parking lot
- E-2008-0928, Severna Park Mr.Tire, automotive fluids washing off parking lot
- E-2008-0927, Severna Park Automotive, automotive fluids washing off parking lot
- E-2008-0926, Double T Diner, leaking dumpster
- E-2008-0925, Gardiner's Furniture, runoff from salt stockpile in parking lot
- E-2008-0924, Enterprise Rent-A-Car, vehicle washing operation
- E-2008-0923, Rich Morton Auto, vehicle washing operation
- E-2008-0922, East Coast Fire Protection, vehicle washing operation
- E-2008-0921, Kop-Flex Inc., vehicle washing operation
- E-2008-0920, Shore Lands Seafood, leaking dumpsters

For 2008 the Department Compliance Database will be used to track the progress of the referrals. All subsequent referrals to other enforcement agencies, such as MDE, will be done by letter rather then personal contact and telephone conversations. Enforcement shall generally follow the following guidelines:

- All sites found to have improperly maintained stormwater management facilities will be enforced under the maintenance provisions contained in Article 16, Section 3-404 of the County Code. Such offences are subject to $1000 civil citations, other civil penalties or criminal enforcement as authorized in the County Code.
- All sites found to be actually discharging non-natural stormwater runoff into a regulated stormdrain shall be enforced under the provisions of Article 16, Section 3-502(1) & (2) of the County Code. Such offences are subject to $1000 civil citations, other civil penalties or criminal enforcement as authorized in the County Code.

- All sites with operations covered by Standard Industrial Code numbers that are found to have potential illicit connections, the potential for spills or the need for coverage under the Maryland General NPDES Permit for Industrial Site Runoff will be referred to MDE in accordance with Condition III.E.3.d.of the MS-4 permit issued to the County. The file will be considered closed once referred to MDE
- All food service operations with leaking dumpsters, foul odors or and outside storage issues will be referred to the Anne Arundel Health Department for enforcement under the State Food Service Code. If necessary they will also be referred to MDE for coverage under the Maryland General NPDES Permit for Industrial Site Runoff. The file will be considered closed once referred to another enforcement agency or agencies.
- All eroded privately owned outfalls with evidence of or the potential for sediment pollution will be referred to MDE in accordance with Title 4 of the Maryland Environment Act. The file will be considered closed once referred to MDE.

Hopefully this memo serves to address all the items discussed at the audit session I attended in the matter if Illicit Connection Elimination. Please contact me at 410-222-7763 should you =need further information or require further assistance.

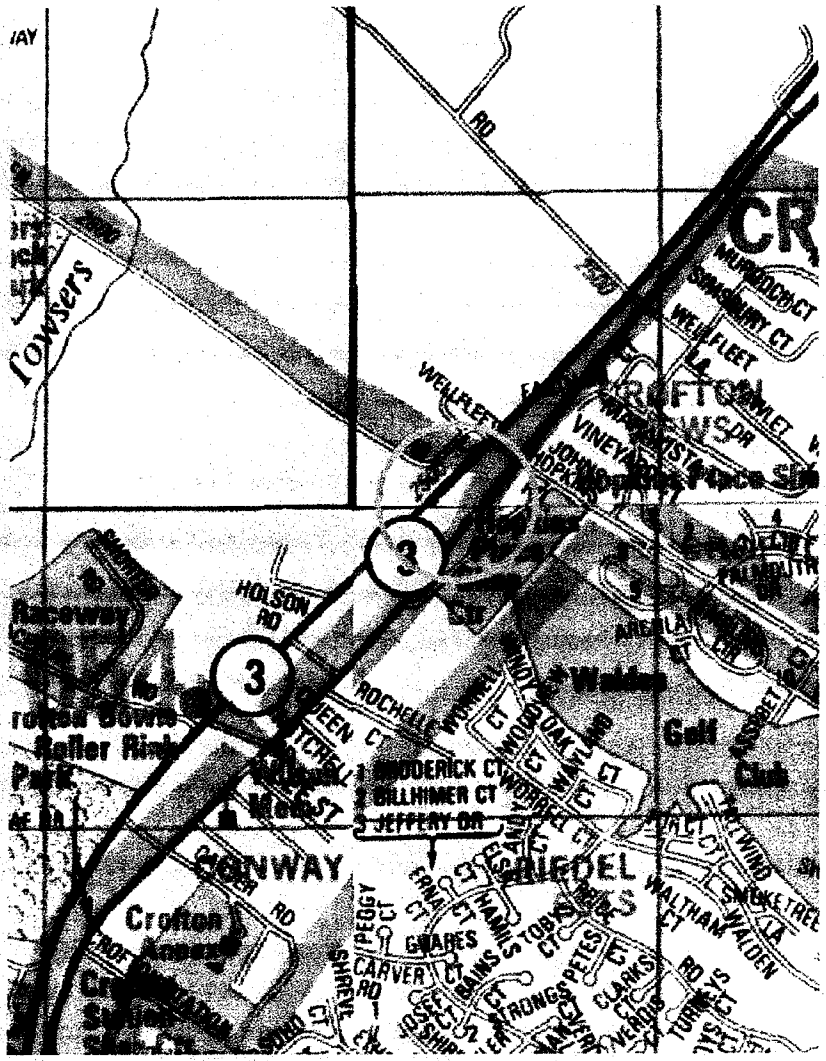
NPDES #2

Illicit Connection

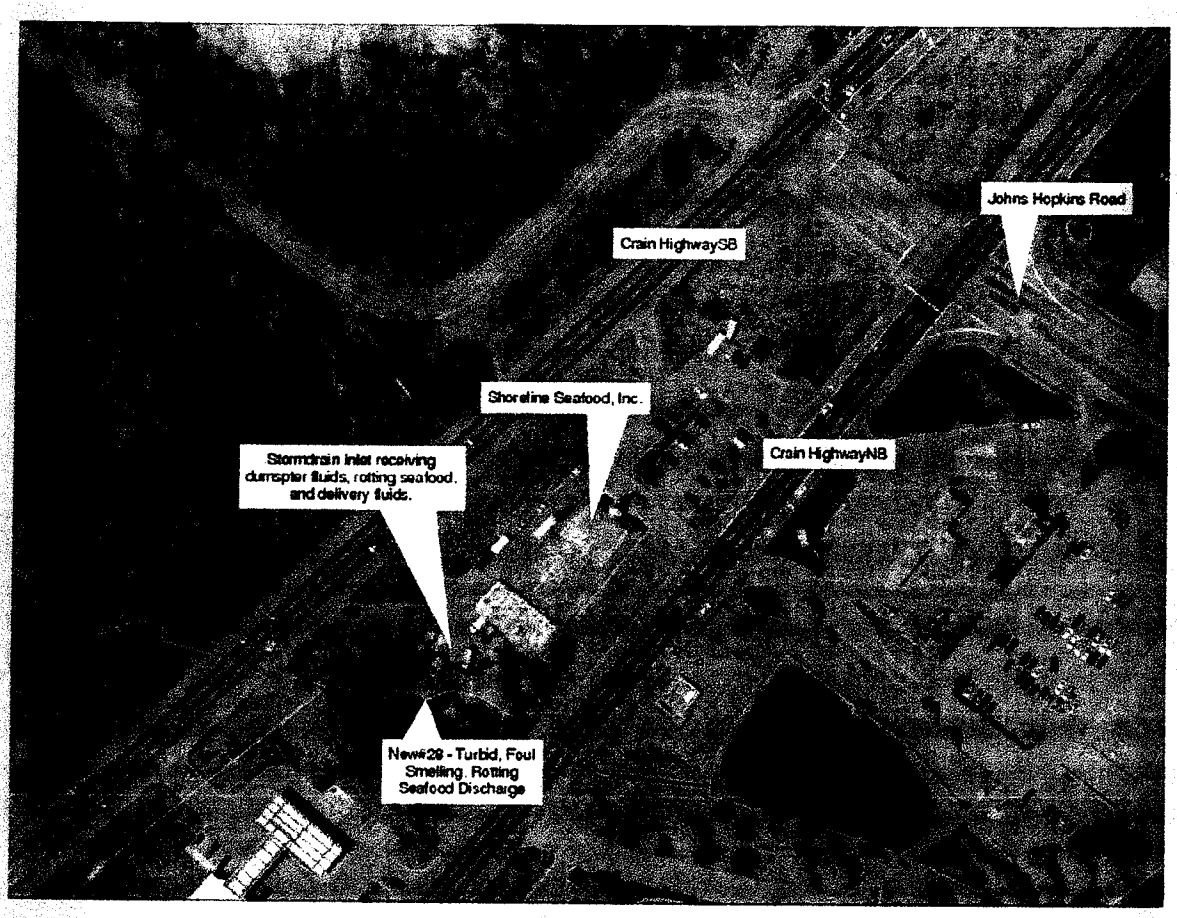
On September 4, 2007, while performing illicit discharge inspections for Anne Arundel County KCI Technologies, Inc. discovered a very turbid, foul smelling, fly infested outfall draining the back of the Shoreline Seafood, Inc. property located along MD Rte. 3. A storm drain inlet was found draining the back parking lot of the seafood company, in which a dumpster was found leaking into the inlet and other sources of fluids including delivery truck fluids and rotting seafood in delivery/trash containers. The smell of this property could be noticed as far as 400 ft away. A sample was not collected at this outfall due to the negligible amount of flow, the turbid ness of the flow, the presence of organic decay/rotting seafood, and the magnitude of fly and other insect populations thriving at the outfall. A greenish/brown flow was present in the ephemeral stream channel downstream of the outfall; however, the flow stopped approximately 25 ft from the outfall.

LOCATION: Shoreline Seafood, Inc. located at the intersection of MD Rte 3 (Northbound/Southbound) and Johns Hopkins Road in Crofton. ADC 13-A13

DAVE,
PLEASE
C-ME
JP



ADC MAP



LOCATION MAP

DUMPSTER, DELIVERY, STORAGE AREA FLUIDS DISCHARGING FROM OUTFALL

DUMPSTER, DELIVERY, STORAGE AREA FLUIDS IN OUTFALL RIP RAP

DUMPSTER, DELIVERY, STORAGE AREA FLUIDS IN STREAM CHANNEL

DUMPSTER, DELIVERY, STORAGE AREA FLUIDS DRAINING TO INLET

DUMPSTER, DELIVERY, STORAGE AREA LEAKING TO INLET

ANNE ARUNDEL COUNTY
MARYLAND

Department of Inspections and Permits
Heritage Office Complex
2664 Riva Road
Annapolis, MD 21401
410-222-7780

Infrastructure and Environmental Programs Inspection Report

To Contact this Inspector, Telephone: 40-222-7768

Inspection Date: 11/14/2007 **TIME:** 1509 **PERMIT** NPDES #2 **SWMA:**

AASCD Name:

OWNER/Permitee Name: Shoreline Seafood Inc.

Address: **CITY:** **STATE:** **ZIP:**

Location: Shoreline Seafood -Md.Rt # 3

Inspection Type: Other Action

Inspection Results:

Corrective Action Taken:

NPDES Inspections.
While performing illicit discharge inspections the following items were noted.
Same condition as noted in report by KCI Technologies,Inc.Dated Sept,24.2007.
Trash dumpster with rotten seafood leaking fluids which drain into inlet then to stream channel.

Received By: _____

I hearby acknowledge of this report by my signature which does not imply agreement or disagreement with its content.

Inspector: DAVE MCNICHOLAS

AFTER TELEPHONE CONVERSATION WITH THE COUNTY SANITARIAN, REFERRED TO AA Co DEPT OF HEALTH FOR ENFORCEMENT UNDER STATE/COUNTY FOOD SERVICE CODE. OPERATION HAS SIC CODE # 2092.

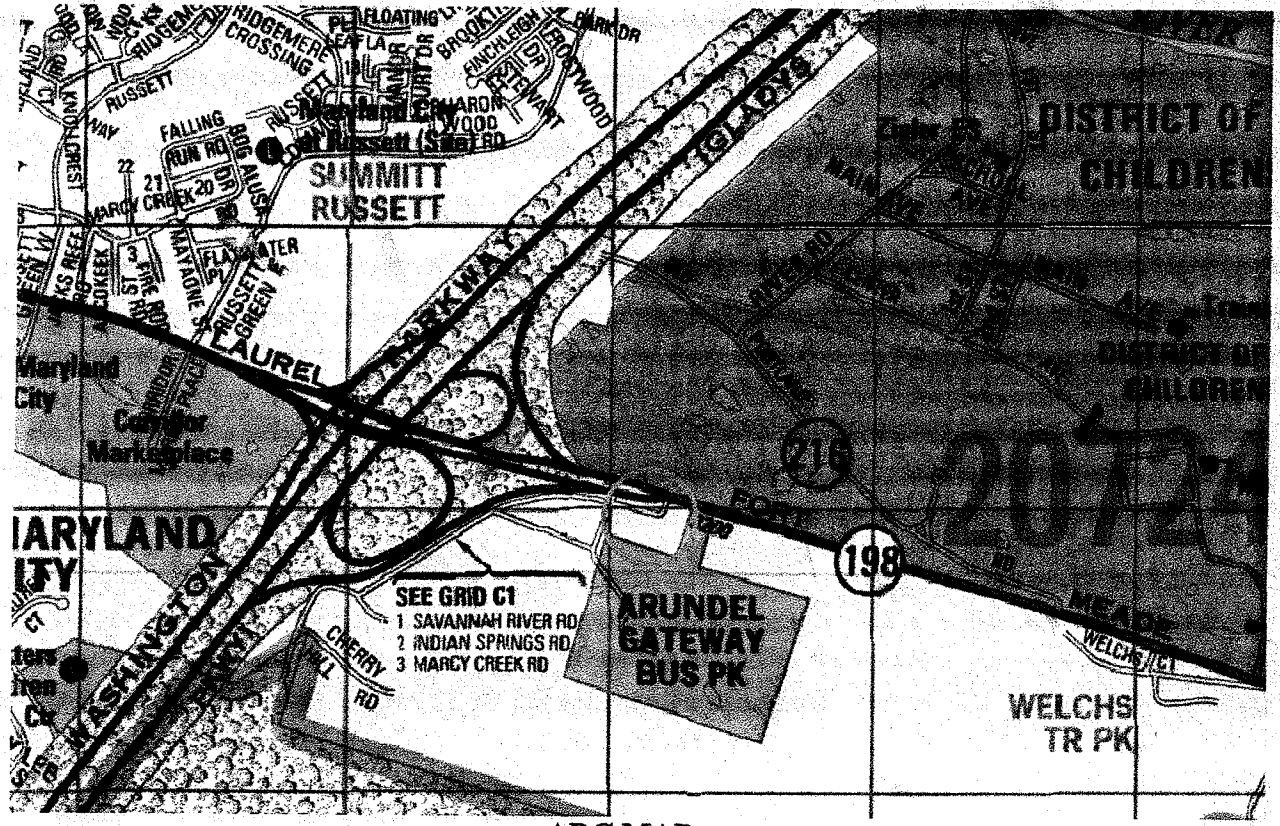
NPDES #3

Illicit Connection #2

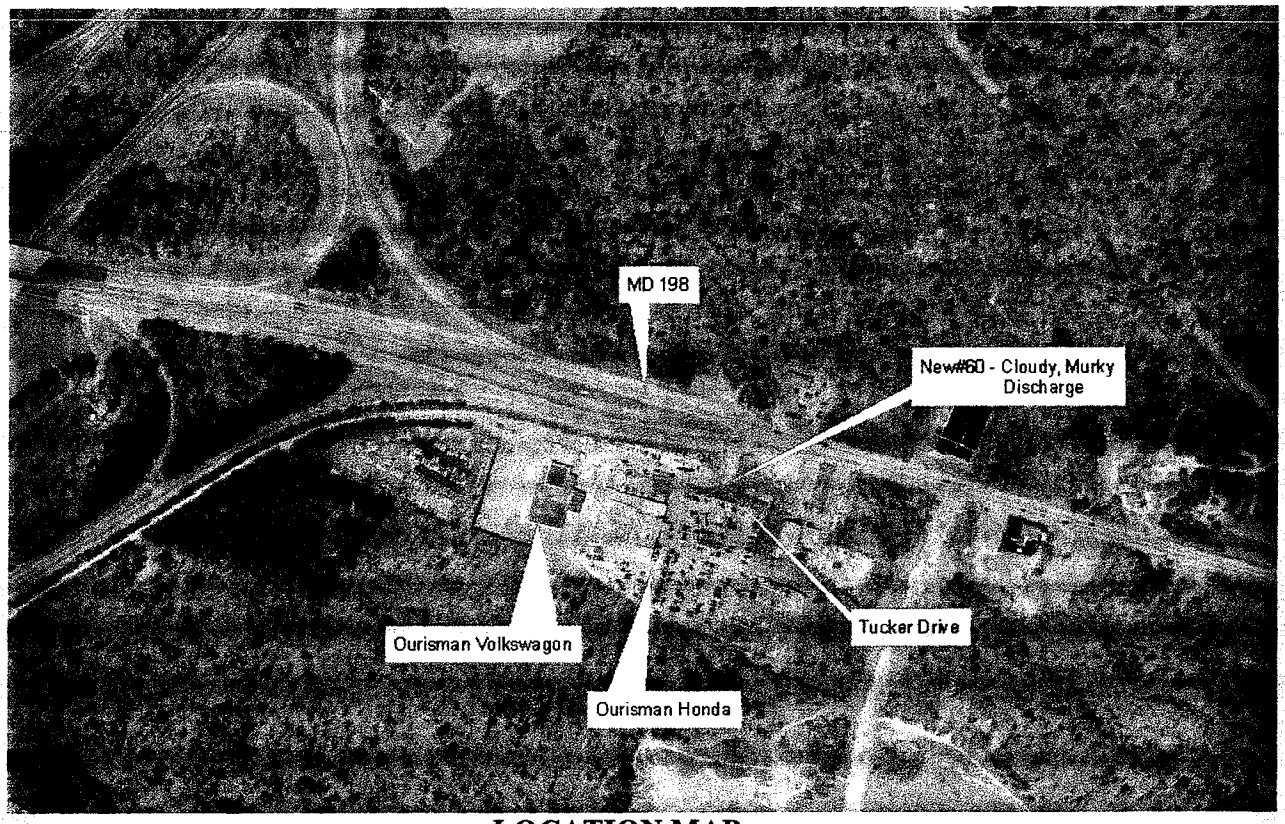
On September 24, 2007, while performing illicit discharge inspections for Anne Arundel County KCI Technologies, Inc. discovered a cloudy, murky looking outfall in front of Ourisman Honda/Volkswagon. At the time of inspection, the outfall was not flowing and there was only a small pool of standing water, so water sampling was unable to be preformed. Upon investigation it was discovered that both Ourisman Volkswagon and Ourisman Honda, upstream of the outfall, had been washing cars and allowing the water to runoff into connecting stormdrains. It also appears Ourisman Honda is using two or three hoses to drain the murky trench drain behind the garage area to a nearby stormdrain inlet. From the field inspection, it appears that this outfall may be collecting detergents as well as other pollutants from the car dealership.

LOCATION: In front of Ourisman Honda, off of Tucker Drive at MD 198. ADC 11-E2

OAMC,
No Stormwater Management found on site 11-9-07



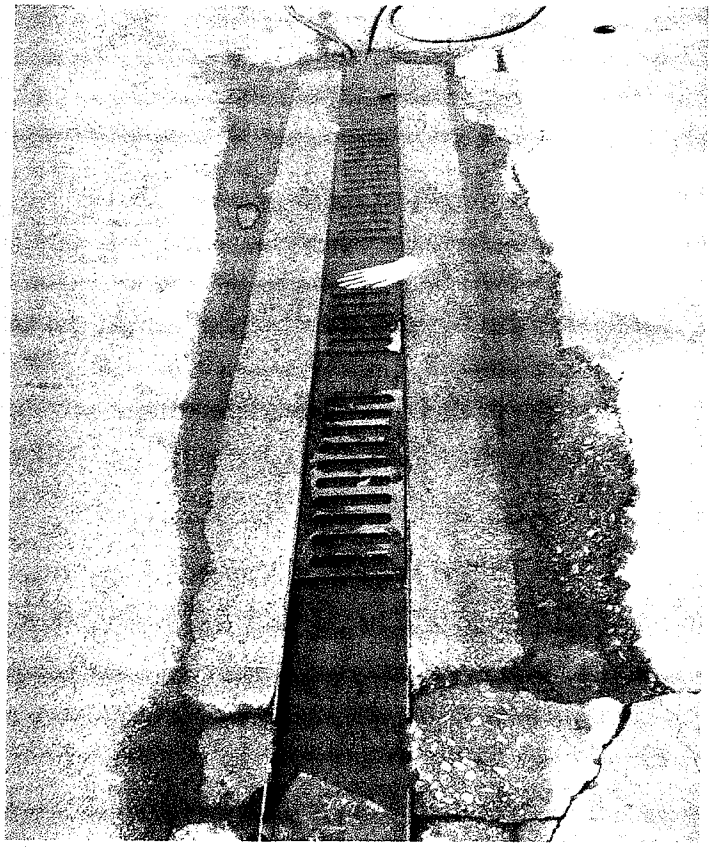
ADC MAP



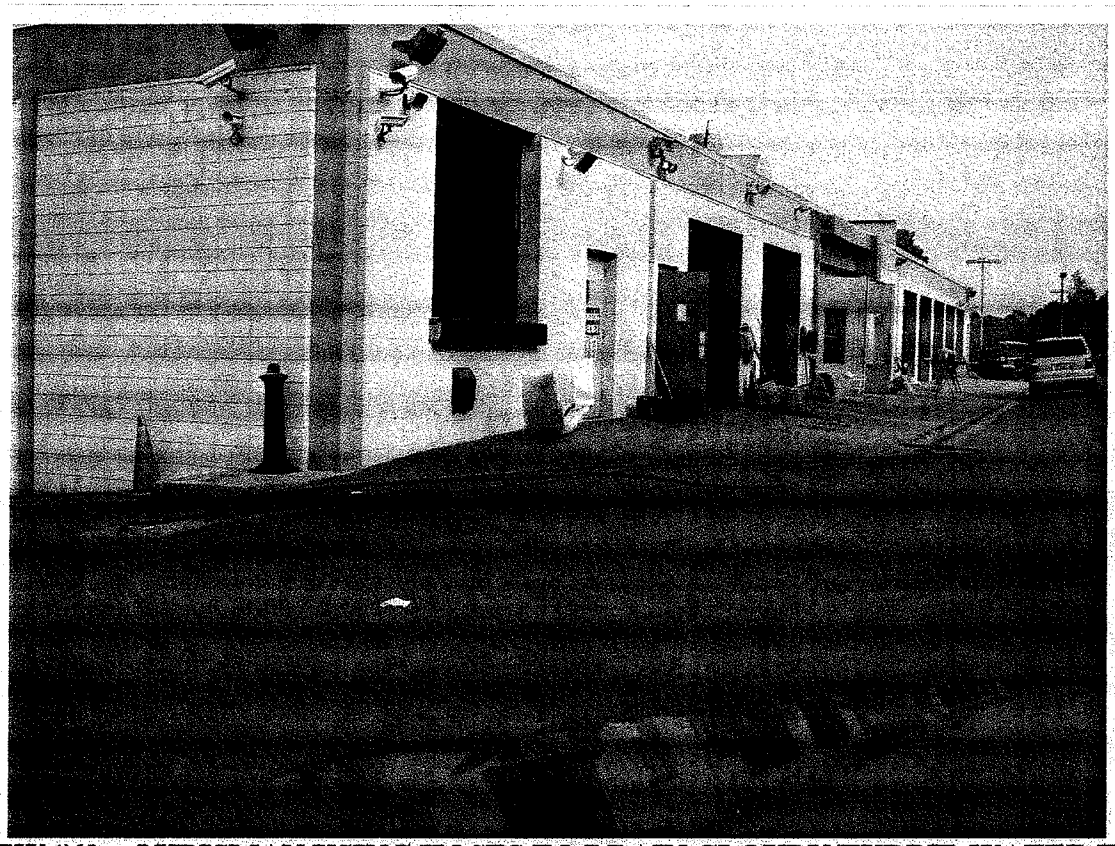
LOCATION MAP

NEW #60 – RUNOFF TO INLET FROM CAR WASHING BEHIND OURISMAN VOLKSWAGON

NEW#60 – DIRTY TRENCH WATER BEHIND OURISMAN HONDA



NEW#60 – DIRTY TRENCH WATER BEHIND OURISMAN HONDA



NEW #60 – OURISMAN USING HOSES TO DRAIN CLOUDY/TURBID WATER TO INLET

NEW #60 – CLOUDY/TURBID OURISMAN HONDA/VOLKSWAGON RUNOFF

smell of oil-grease at outfall 11-9-07 D.A.McC.

ANNE ARUNDEL COUNTY
MARYLAND

Department of Inspections and Permits
Heritage Office Complex
2664 Riva Road
Annapolis, MD 21401
410-222-7780

Infrastructure and Environmental Programs Inspection Report

To Contact this Inspector, Telephone: 40-222-7768

Inspection Date: 11/15/2007 **TIME:** 841 **PERMIT** NPDES#3 **SWMA:**

AASCD Name:

OWNER/Permitee Name: Ourisman Honda # 301-498-7400

Address: 3371 Ft.Meade Road **CITY:** LAUREL **STATE:** MD **ZIP:** 20724

Location: Tucker Dr. + Rt.198

Inspection Type: Storm Water Maintenance

Inspection Results:

Corrective Action Taken:

NPDES Inspections.
While performing illicit discharge inspections the following items were noted same as KCI Technologies,Inc. dated Sept.24,2007.
Slot drain is not draining in front of rear garage doors,hoses used to drain this to near by inlet.
Could not locate any stormwater management device.
Appears the outfall of this site is collecting detergents and other pollutants from this car dealership.There is the smell of grease-oil at rip-rap outfall.

Received By: _____

I hearby acknowledge of this report by my signature which does not imply agreement or disagreement with its content.

Inspector: DAVE MCNICHOLAS

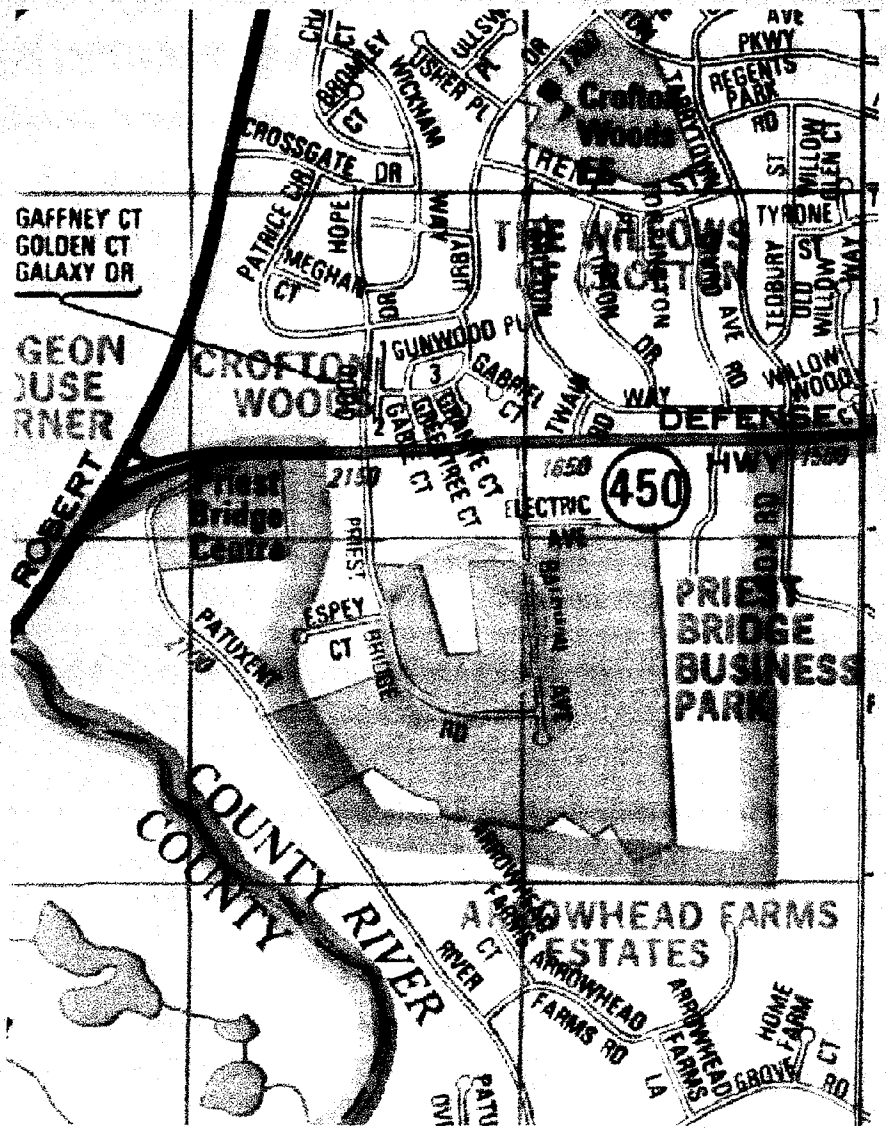
SITE HAS SIC CODE # 5511 AND REQUIRES COVERAGE UNDER THE MARYLAND GENERAL PERMIT FOR INDUSTRIAL SITE RUNOFF. CALLED MDE AND ADVISED INSPECTOR NADINE ST PARRIE OF SITUATION. SHE WILL INVESTIGATE & ENFORCE AS NECESSARY

NPDES 6

Upland Pollutant Source #1

On August 14, 2007, while performing illicit discharge inspections for Anne Arundel County, KCI Technologies, Inc. discovered runoff going into an inlet located in the Patuxent Companies ~~Maintenance Facility parking~~ lot. At the time of inspection, the pavement around the inlet was wet with a foamy residue on the blacktop. There was also a trail of fluids leading to the inlet from a heavy equipment repair garage adjacent to the inlet. There appeared to be hoses, buckets, vacuums and other supplies necessary to wash or rinse vehicles at this location into the inlet. No storm water management or water quality devices were observed at the site; however, storm drain mapping was not available for this area and access was limited due to private property and fences. Outfalls were inspected that most likely drain this inlet; however, no detergents were found and only 0.1 ppm of chlorine were detected along with pH values of 7.6 indicating an illicit discharge was not present at the time of inspection.

LOCATION: Off of Baldwin Ave. in the Patuxent Companies Maintenance Facility parking lot within the Priest Bridge Business Park. ADC 13-A13

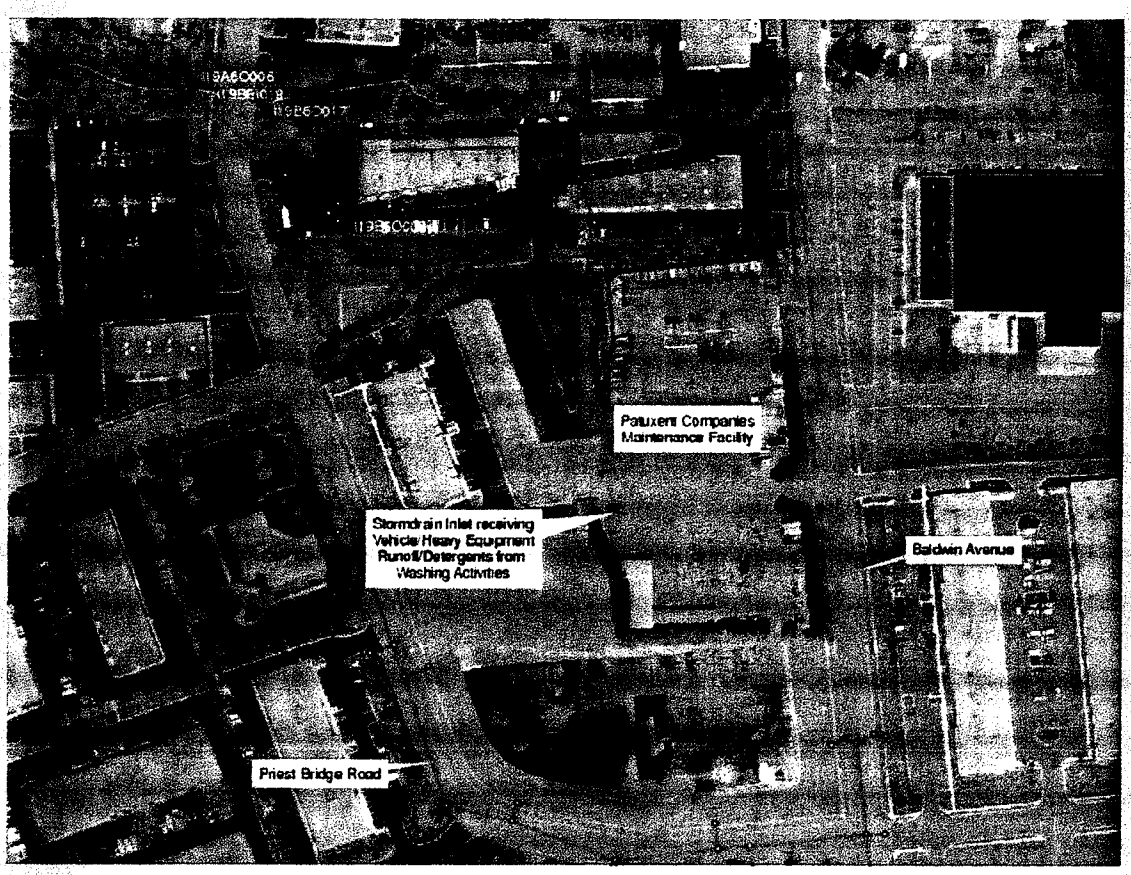


ADC MAP

McHenry Equipment.
Operating 1 month

2124

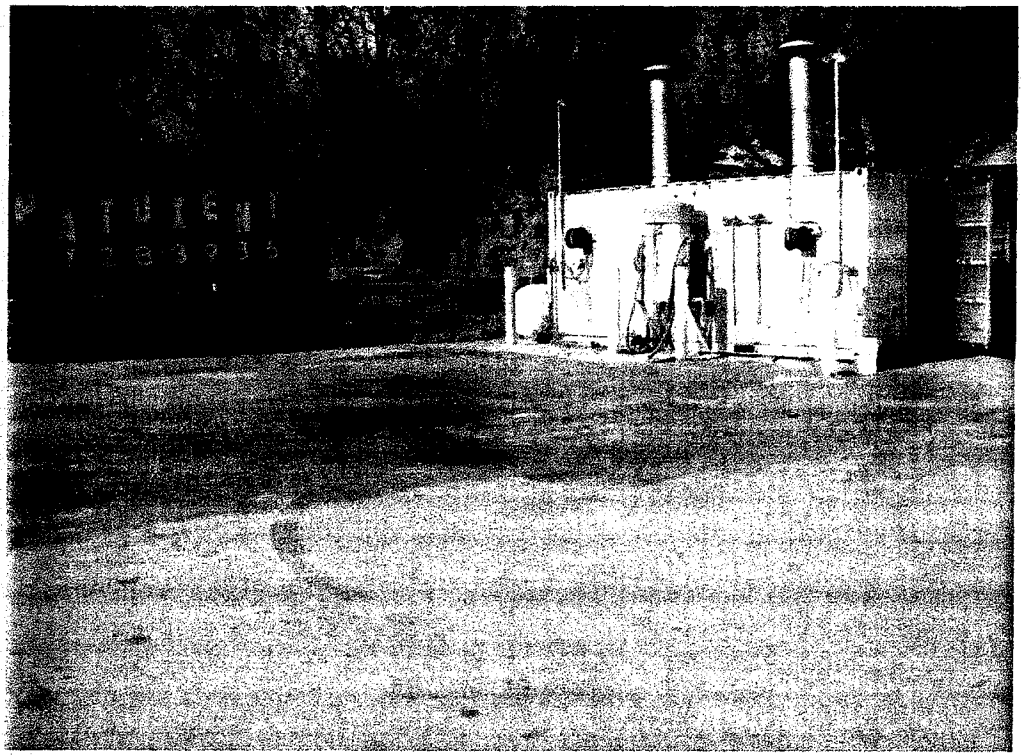
Victor Style
410-723-0503



LOCATION MAP

ENTRANCE TO PATUXENT MAINTENANCE FACILITY OFF BALDWIN AVE.

HEAVY EQUIPMENT FLUIDS LEAKING TO STORMDRAIN INLET



HEAVY EQUIPMENT FLUIDS/WASHING/DETERGENTS AREA INTO INLET

ANNE ARUNDEL COUNTY
MARYLAND

Department of Inspections and Permits
Heritage Office Complex
2664 Riva Road
Annapolis, MD 21401
410-222-7780

Infrastructure and Environmental Programs Inspection Report

To Contact this Inspector, Telephone: 40-222-7768

Inspection Date: 11/15/2007 **TIME:** 1352 **PERMIT** NPDES6 **SWMA:**

AASCD Name:

OWNER/Permitee Name: Patuxent Materials Inc.

Address: 2124 Priest Bridge Rd. **CITY:** GAMBRILLS **STATE:** MD **ZIP:** 21054

Location: Priest Bridge Rd.

Inspection Type: Other Action

Inspection Results: In Compliance

Corrective Action Taken:

NPDES Inspections.
While performing illicit discharge inspections the following items were noted.
Walked site with Victor Style who showed the McHenry Equipment water purification system which has been in operation a month now.

Received By: _____

I hearby acknowledge of this report by my signature which does not imply agreement or disagreement with its content.

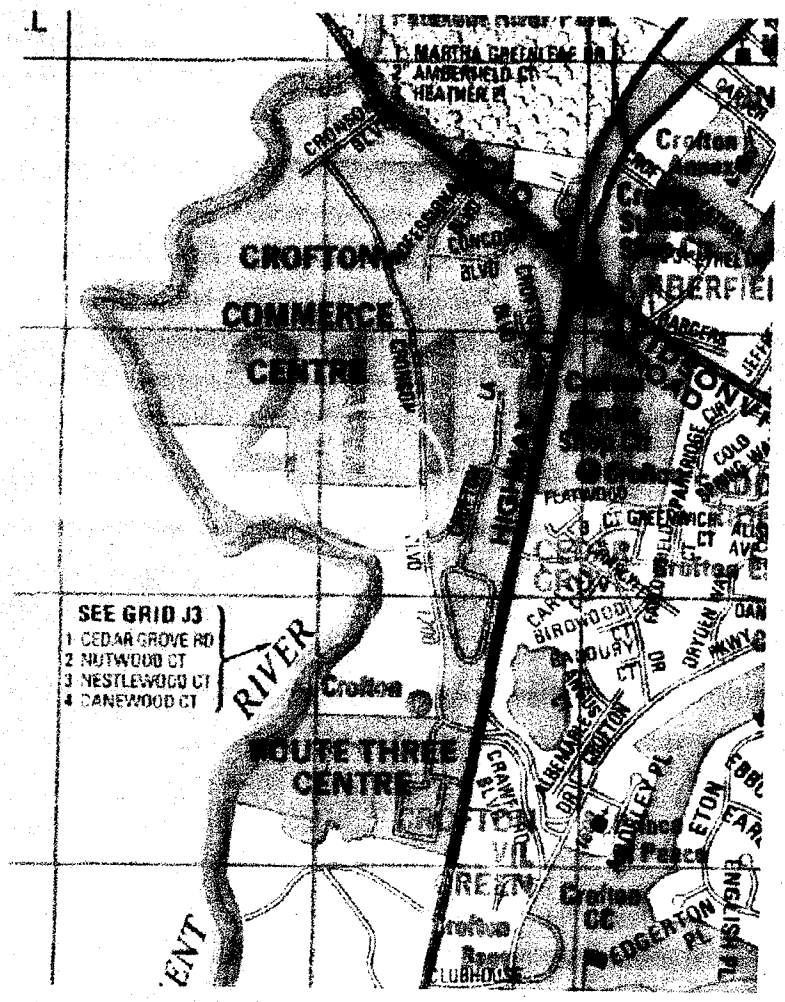
Inspector: DAVE MCNICHOLAS

NPDES #1

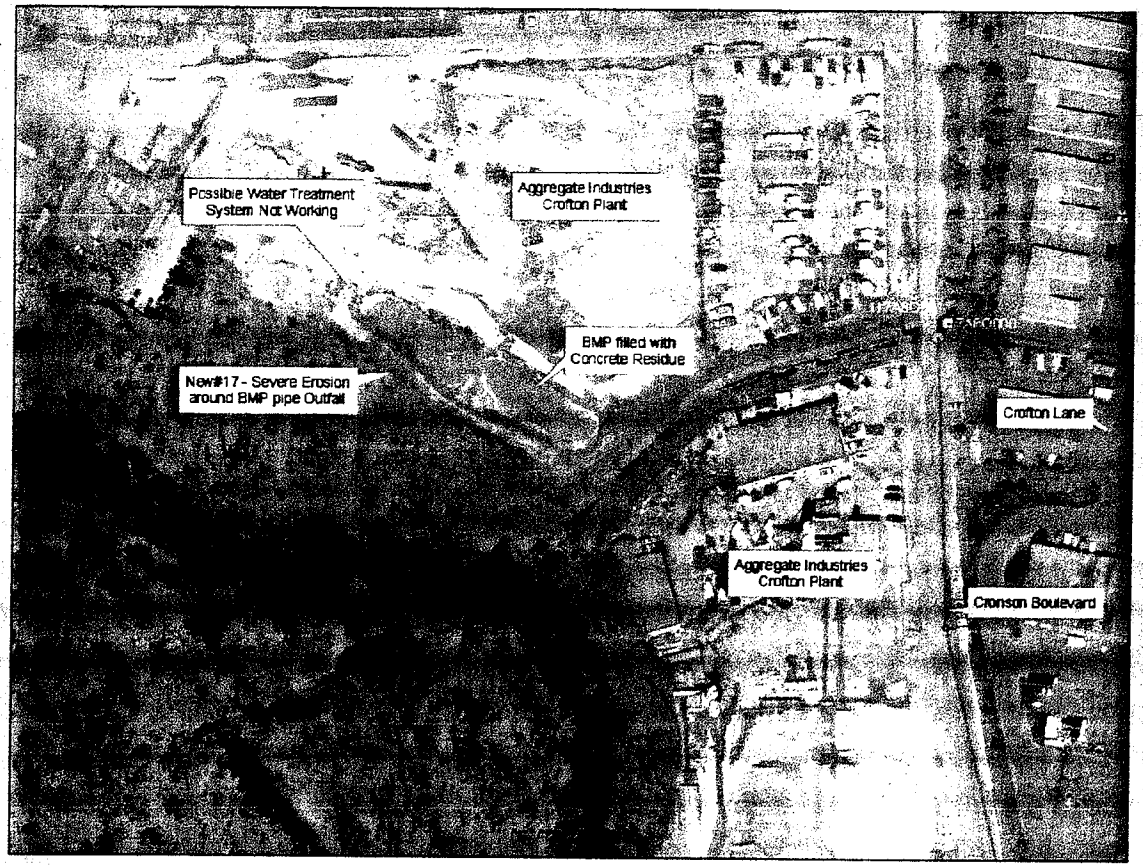
Upland Pollutant Source #2

On August 15, 2007, while performing illicit discharge inspections for Anne Arundel County KCI Technologies, Inc. discovered a large, concrete laden BMP located at the Aggregate Industries Crofton Plant. This BMP appears to receive wastewater from concrete production operations and the rinsing/filling of concrete trucks. The pond is heavily laden with suspended concrete residue as well as thick deposits of lime and concrete residue on the bottom. There appeared to be a pump/water treatment system at the end of the pond; however, maintenance and repair may need to be accomplished based on the condition of the equipment. An outfall pipe was found to be dry; however, severe erosion was noted around the outfall and on the dam embankment around the outfall. The upstream end of the 24" CMP outfall pipe was not located due to overgrown vegetation and unstable side walls of the BMP. It appears controls are in place and in all likelihood NPDES permits are established for this property; however, a review/inspection of their permit and BMP may be warranted to determine if Aggregate Industries is following the conditions set out in the permit.

LOCATION: Aggregate Industries Crofton Plant located along Cronson Boulevard. ADC 17-J3

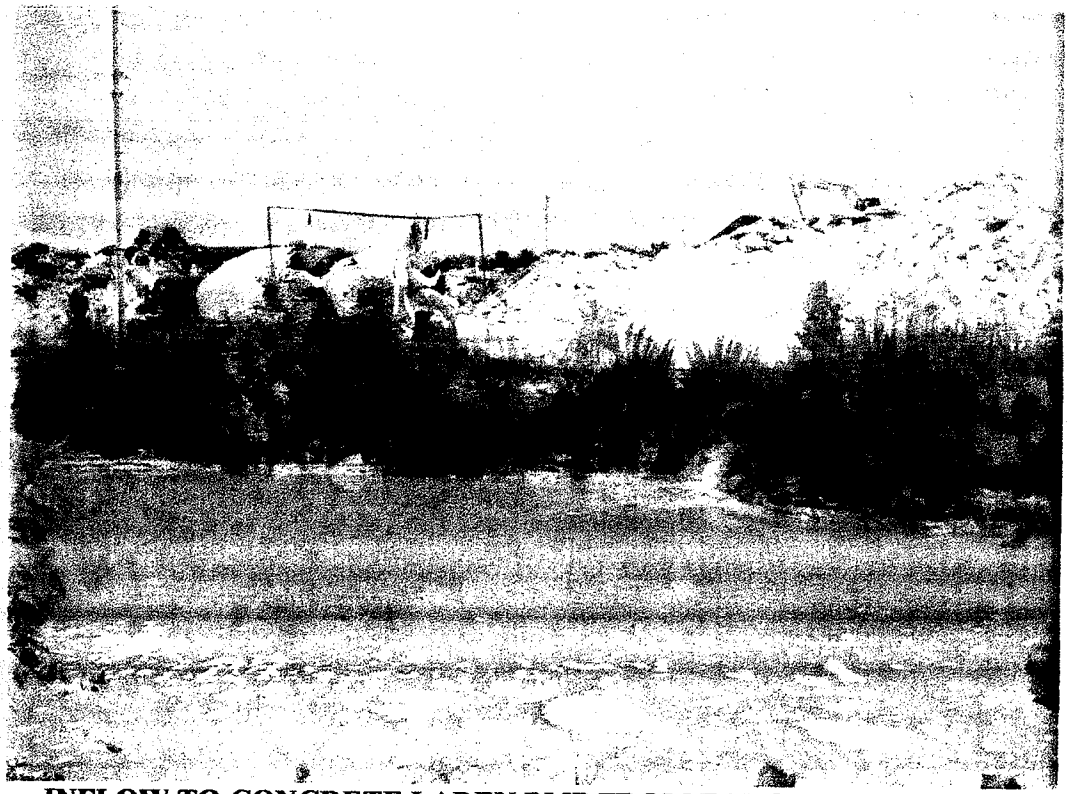


ADC MAP



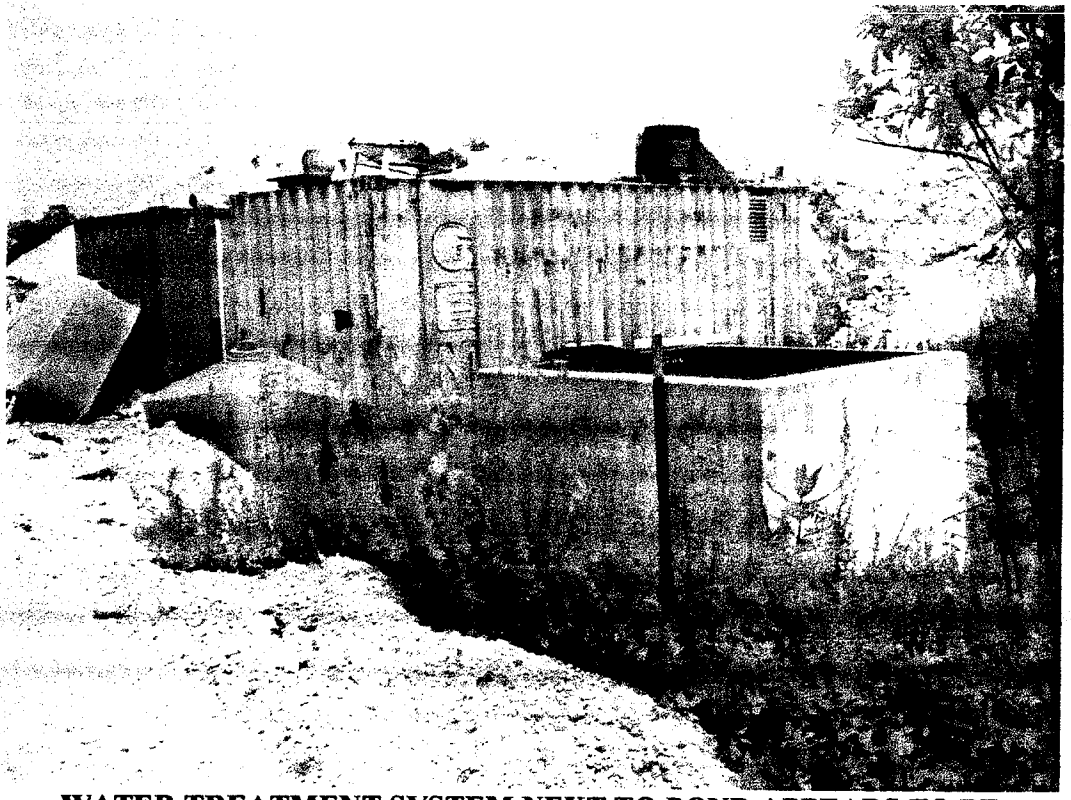
LOCATION MAP

AGGREGATE INDUSTRIES CONCRETE LADEN BMP



INFLOW TO CONCRETE LADEN BMP FROM TRUCK OPERATIONS

NEW # 17 - OUTFALL FROM CONCRETE LADEN BMP, SEVERE EROSION



WATER TREATMENT SYSTEM NEXT TO POND APPEARS TO BE OFFLINE/NEGLECTED

CONCRETE LADEN BMP AT AGGREGATE INDUSTRIES

ANNE ARUNDEL COUNTY
MARYLAND

Department of Inspections and Permits
Heritage Office Complex
2664 Riva Road
Annapolis, MD 21401
410-222-7780

Infrastructure and Environmental Programs Inspection Report

To Contact this Inspector, Telephone: 40-222-7768

Inspection Date: 11/14/2007 **TIME:** 1414 **PERMIT** NPDES #1 **SWMA:**

AASCD Name:

OWNER/Permitee Name: Aggregate Industries

Address: 6401 Golden Triangle,Suite 400 **CITY:** GREENBELT **STATE:** MD **ZIP:** 20770

Location: 1668 Cronson Blvd.

Inspection Type: Storm Water Maintenance

Inspection Results:

Corrective Action Taken:

NPDES inspection revealed that no water was leaving pond at present time,however severe erosion was noticed at outfall area of 24"CMP.
Fill wash out with soil then add rip-rap channel to prevent erosion for this outfall area.
This 24" CMP has no dewatering device attached on the pond side.Concrete residue and lime was seen in pipe which deposits to Patuxent River.
Walked site with Sharon Hogan-Environmental Advisor of company
301-982-1400 ext.517 and
Chris Stockslager 301-399-2553

Received By: _____

I hearby acknowledge of this report by my signature which does not imply agreement or disagreement with its content.

Inspector: DAVE MCNICHOLAS

November 20, 2007

AGGREGATE
INDUSTRIES

Dave McNicholas
Environmental Programs Inspector
A.A. Co. Dept. Inspections and Permits
2664 Riva Rd., P. 0. Box 6675
Annapolis, MD 21401

Dear Mr. McNicholas:

Please find enclosed, copies of the Stormwater Pollution Prevention Plan and Spill Control and Countermeasures Plan for the Crofton Readymix facility you requested. Please note that the plans are currently under revision/update by our Permitting Department and so I've provided you with the latest draft copies. These plans will provide you with description of our site BMPs.

Also, I spoke with the Plant Manager, Ronnie Kane, regarding the clean-out schedule for the wash pit ponds. The ponds were last cleaned on June 7, 2007. We rent a long-stick excavator usually twice a year to dip the ponds. Mr. Kane indicated that there is no written schedule, but rather the ponds are dipped on an as-needed basis when the sediment levels build up under the walkway and restrict flow between the ponds.

As mentioned during your visit on Nov. 14, 2007, this water is recycled to our wash pits for cleaning the mixer trucks. According to my DMR records, this pond has not discharged since the second quarter of 2002.

Please contact me if you need further information.

Respectfully,

Sharon Hogan
Regional Environmental Advisor

AGGREGATE INDUSTRIES
MID ATLANTIC REGION
6401 Golden Triangle Drive, Ste. 400
Greenbelt, MD 20770
Telephone (301)982-1400
Facsimile (301) 837-5696
www.aggregate-us.com

ANNE ARUNDEL COUNTY
MARYLAND
County Executive John R. Leopold

Department of Inspections and Permits
2664 Riva Road, Annapolis, MD 21401
Telephone: (410) 222-7790
Fax: (410) 222-7970
www.aacounty.org

November 30, 2007

Ms. Heather Nelson, Acting Division Chief
Water Management Administration, Compliance Program
1800 Washington Boulevard
Baltimore, MD 21230

Re: Industrial NPDES Permit Violation Referral
Aggregate Industries
1668 Cronson Boulevard, Crofton, MD 21114

Dear Ms. Nelson:

In accordance with NPDES Municipal Separate Storm Sewer System Discharge Permit #MD0068306 issued to Anne Arundel County, the referenced violation of the State issued Industrial NPDES Permit is being referred to your office for enforcement. Based on a recent Illicit Connection Detection evaluation of the outfall serving this operation, the Department believes a violation of the Industrial NPDES Permit and Pollution Prevention Plan for this operation exists. Since an illicit storm sewer connection was not detected but, a potential violation of the Industrial NPDES Permit was detected, this matter is being referred to MDE in accordance with the conditions contained in the County's NPDES Municipal Separate Storm Sewer System Discharge Permit. Enclosed with this letter is a copy of the Environmental Programs Inspection Report of November 14, 2007, indicating an erosive outfall and indications of concrete and lime residue in the discharge pipe.

Very Truly Yours,

John P. Peacock, Sr.
Environmental Code Administrator
Department of Inspections and Permits

vbg

cc: SW-NPDES File
JP reader File
Chron

ANNE ARUNDEL COUNTY
MARYLAND

Department of Inspections and Permits
Heritage Office Complex
2664 Riva Road
Annapolis, MD 21401
410-222-7780

Infrastructure and Environmental Programs Inspection Report

To Contact this Inspector, Telephone: 40-222-7768

Inspection Date: 11/14/2007 **TIME:** 1414 **PERMIT** NPDES #1 **SWMA:**

AASCD Name:

OWNER/Permitee Name: Aggregate Industries

Address: 6401 Golden Triangle,Suite 400 **CITY:** GREENBELT **STATE:** MD **ZIP:** 20770

Location: 1668 Cronson Blvd.

Inspection Type: Storm Water Maintenance

Inspection Results:

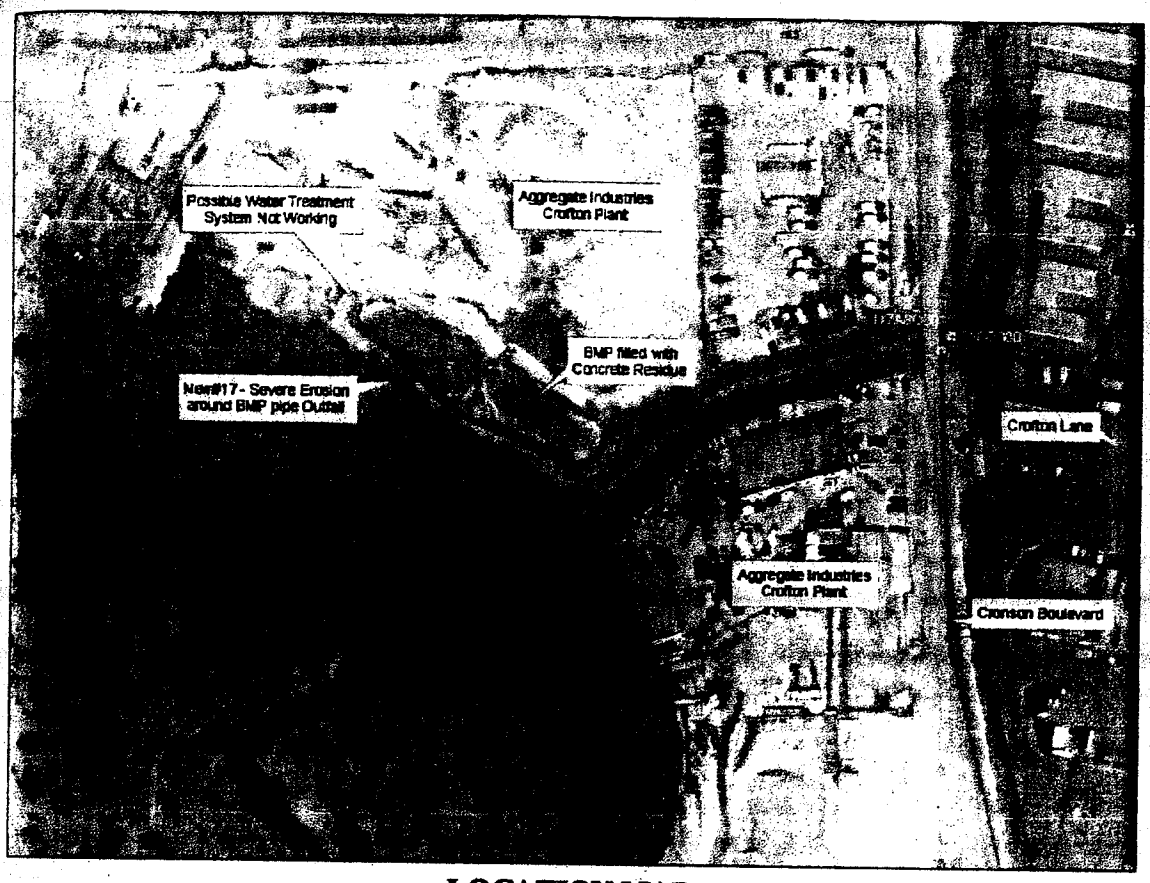
Corrective Action Taken:

NPDES inspection revealed that no water was leaving pond at present time,however severe erosion was noticed at outfall area of 24"CMP.
Fill wash out with soil then add rip-rap channel to prevent erosion for this outfall area.
This 24" CMP has no dewatering device attached on the pond side.Concrete residue and lime was seen in pipe which deposits to Patuxent River.
Walked site with Sharon Hogan-Environmental Advisor of company
301-982-1400 ext.517 and
Chris Stockslager 301-399-2553

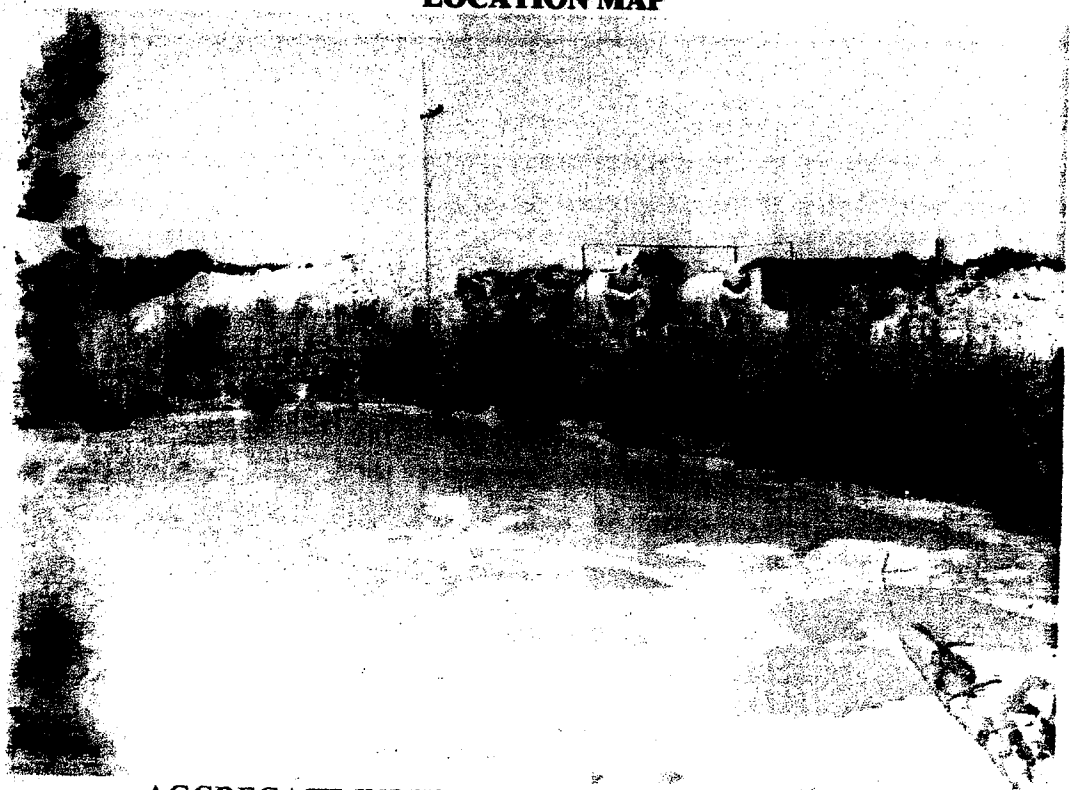
Received By: _____

I hearby acknowledge of this report by my signature which does not imply agreement or disagreement with its content.

Inspector: DAVE MCNICHOLAS



LOCATION MAP



AGGREGATE INDUSTRIES CONCRETE LADEN BMP

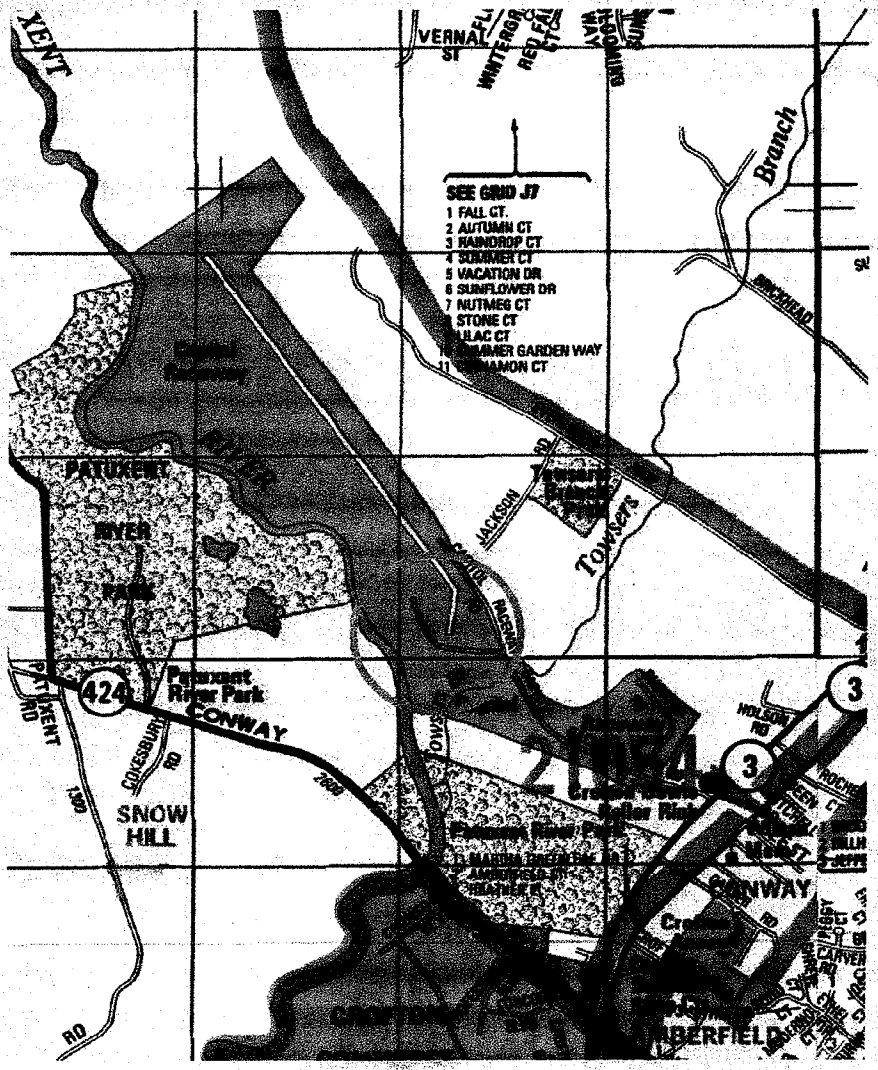
NPDES7

DAVE, ADD THIS TO YOUR CIS; D

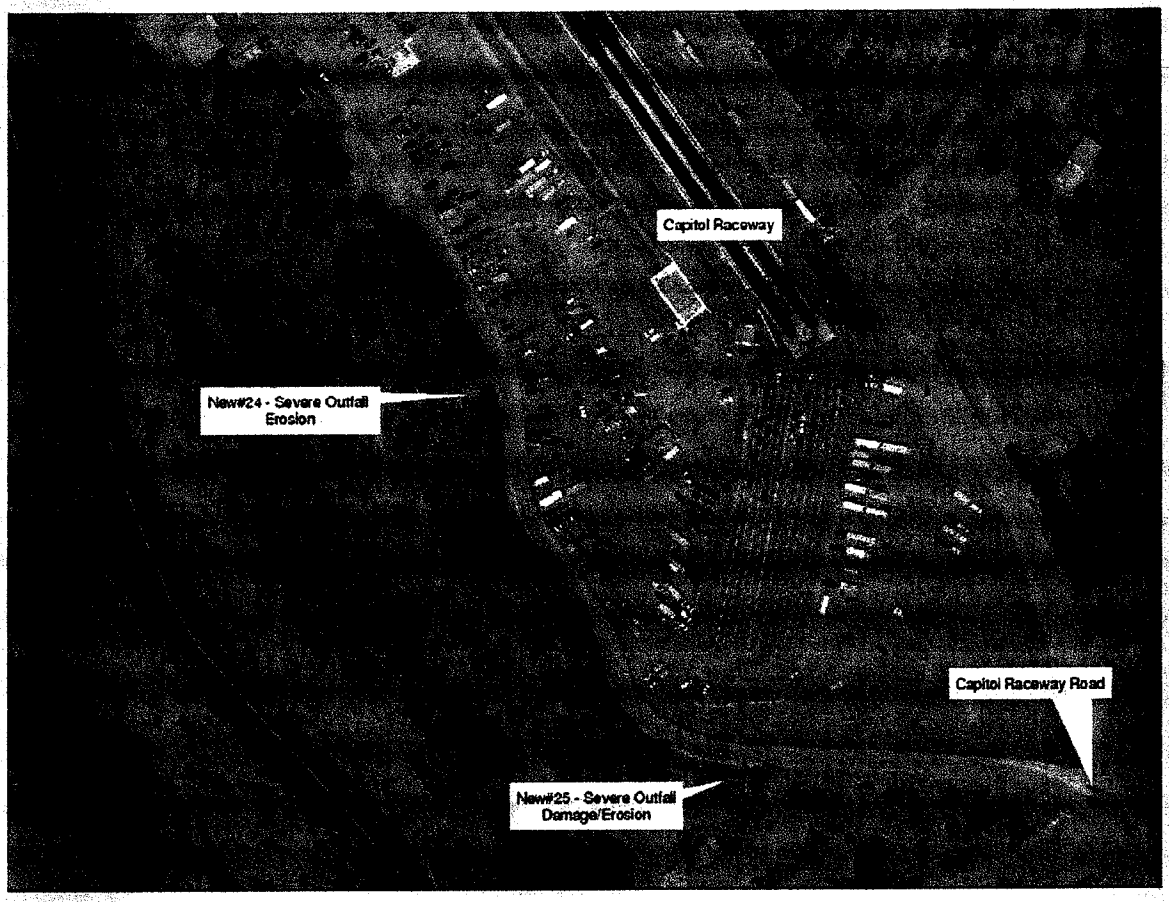
Upland Pollutant Source #3

On September 4, 2007, while performing illicit discharge inspections for Anne Arundel County KCI Technologies, Inc. discovered two severely eroded outfall pipes located at the Capitol Raceway drag racing complex. Outfall New #24 was a short, 24" CMP that drains a significant portion of the raceway. The downstream side of the outfall was a very steep hill in which a very large and deep scour hole has formed around the outfall. The height from the invert of the outfall to the bottom of the scour hole is approximately 25-30ft. Outfall New #25 was located near the entrance of the Capital Raceway facility and again drains a significant portion of the raceway. This 24" CMP is severely eroded and damaged at the outfall. The pipe has separated, allowing water to flow out of the pipe causing erosion around the pipe and hillside road embankment. The pipe is also blocked with excessive trash causing the pipe to separate and erode the embankment. At the time of inspection, there was no flow in either of the storm drain pipes.

LOCATION: Capitol Raceway Complex, located along Capitol Raceway Road adjacent to the drag racing track. ADC 12-J13



ADC MAP



LOCATION MAP

NEW #24 - SCOUR HOLE IN HILLSIDE, OLD CMP PIPE AT BOTTOM

NEW #24 - SEVERE EROSION AT OUTFALL, 25-30ft SCOUR HOLE IN HILLSIDE

NEW #25 - SEVERE EROSION AT OUTFALL, PIPE IS BLOCKED/DEFORMED

NEW #25 – PIPE IS SEPERATED ALLOWING EROSION TO OCCUR

NEW #25 – EXCESSIVE TRASH AT THE OUTFALL

ANNE ARUNDEL COUNTY
MARYLAND

Department of Inspections and Permits
Heritage Office Complex
2664 Riva Road
Annapolis, MD 21401
410-222-7780

Infrastructure and Environmental Programs Inspection Report

To Contact this Inspector, Telephone: 40-222-7768

Inspection Date: 11/15/2007 **TIME:** 1443 **PERMIT** NPDES7 **SWMA:**

AASCD Name:

OWNER/Permitee Name: Capitol Raceway

Address: **CITY:** GAMBRILLS **STATE:** MD **ZIP:** 21054

Location: Capitol Raceway

Inspection Type: Other Action

Inspection Results:

Corrective Action Taken:

NPDES Inspections.
While performing illicit discharge inspections the following items were noted.
Same results found as did KCI Technologies Inc.dated Sept.4,2007.
Two very large erosion areas #24 + #25 (pictures)which drain much of the race track.

Received By: _____

I hearby acknowledge of this report by my signature which does not imply agreement or disagreement with its content.

Inspector: DAVE MCNICHOLAS

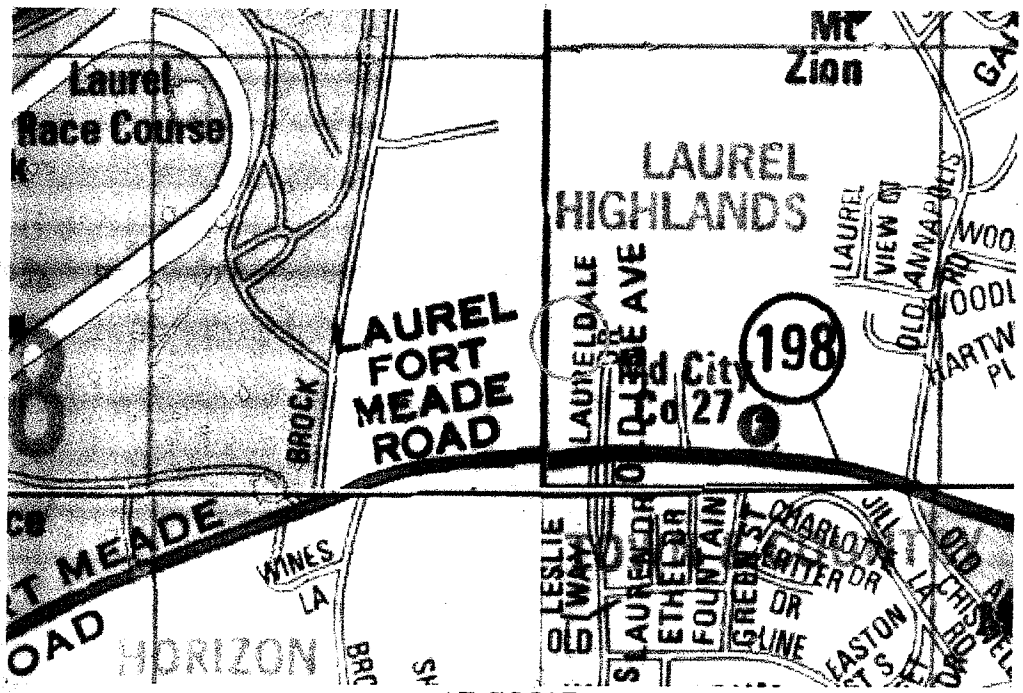
NO ILLICIT CONNECTION. POTENTIAL SEDIMENT POLLUTION VIOLATION OF TITLE 4, SECTION 413 OF THE ENVIRONMENTAL ACT, WHICH CAN ONLY BE ENFORCED BY MDE. REFERRED TO MDE COMPLIANCE INSPECTOR NADINE ST PARRIE FOR FURTHER ENFORCEMENT/INVESTIGATION

NPDES #4

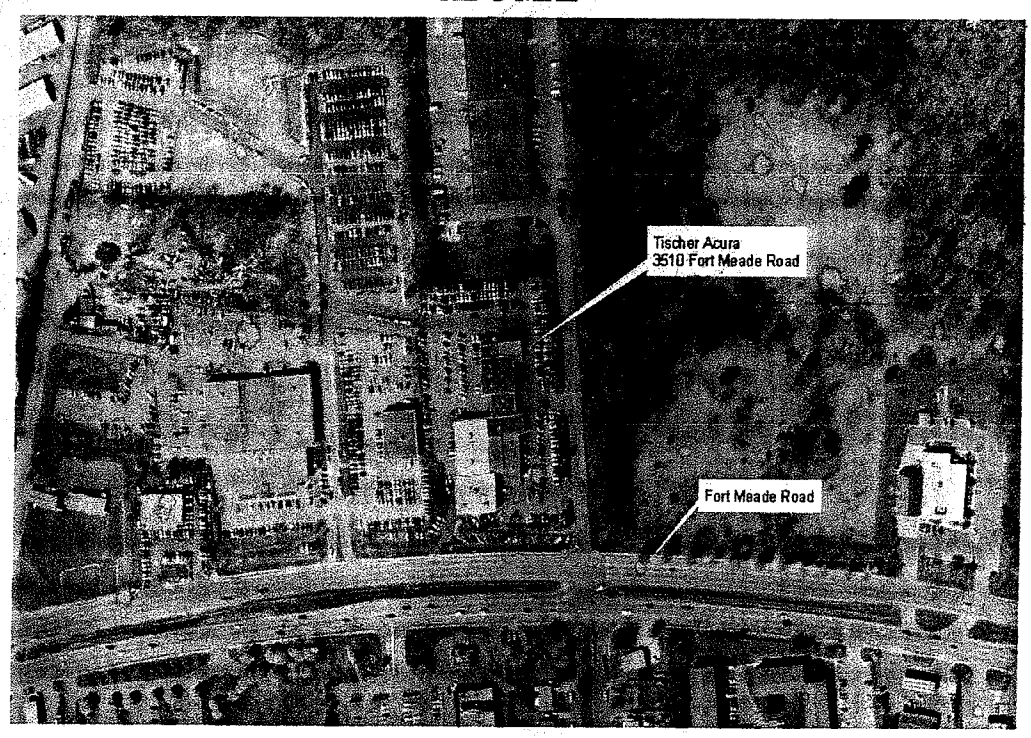
Upland Pollutant Source #4

On September 27, 2007, while performing illicit discharge inspections for Anne Arundel County KCI Technologies, Inc. discovered a significant amount of runoff being produced from Tischer Acura. The dealership appears to be washing cars and allowing the detergent laden water to sheet flow across the parking lot. No storm water management was found at the site and no water samples were collected.

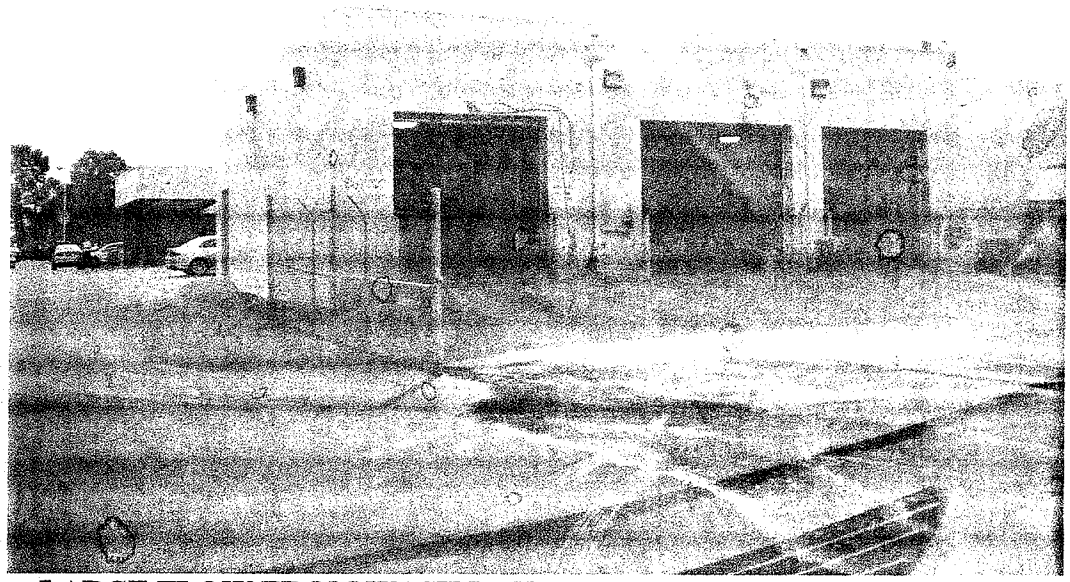
LOCATION: In back of Tischer Acura, 3510 Fort Meade Road. ADC 5-A13



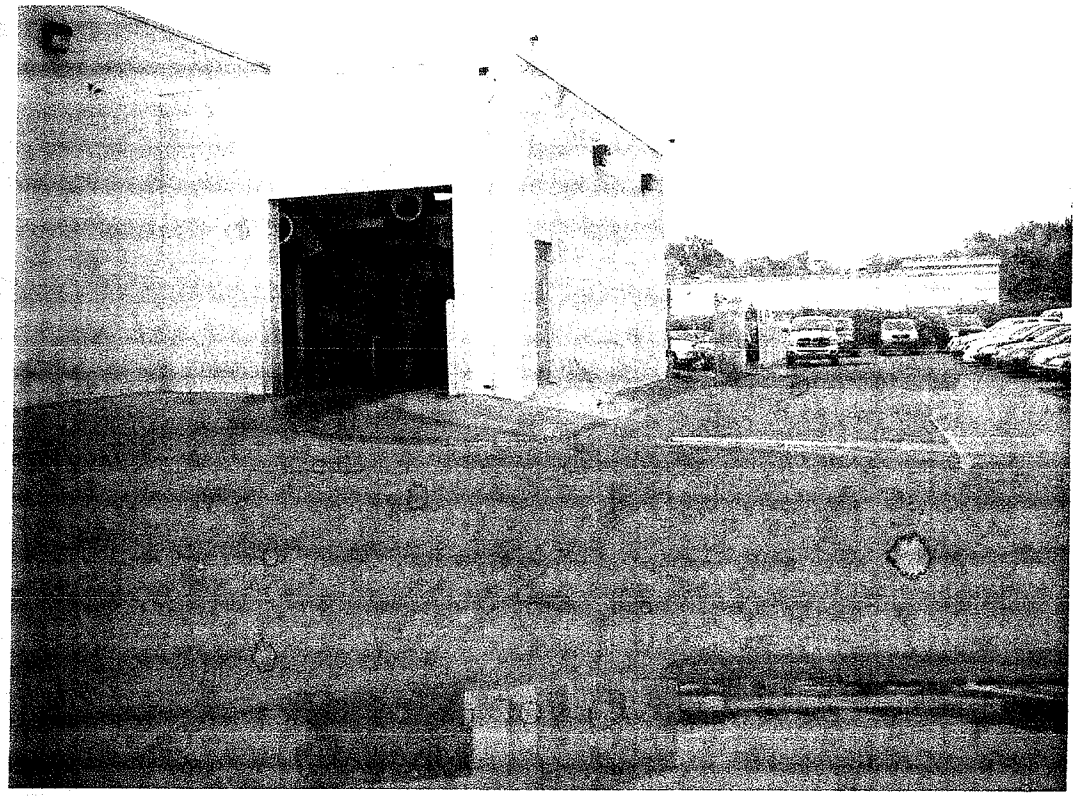
ADC MAP



LOCATION MAP



LARGE FLOW FROM WASH BAY AREA BEHIND TISCHER ACURA



FRONT OF WASH BAY AT TISCHER ACURA

LARGE FLOW FROM WASH BAY AREA BEHIND TISCHER ACURA

FLOW FROM WASH BAY AREA DRAINING ALONG PARKING LOT

ANNE ARUNDEL COUNTY
MARYLAND

Department of Inspections and Permits
Heritage Office Complex
2664 Riva Road
Annapolis, MD 21401
410-222-7780

Infrastructure and Environmental Programs Inspection Report

To Contact this Inspector, Telephone: 40-222-7768

Inspection Date: 11/15/2007 **TIME:** 1037 **PERMIT** NPDES4 **SWMA:**

AASCD Name:

OWNER/Permitee Name: Tischer Acura #301-575-1717

Address: 3510 Ft.Meade Road **CITY:** LAUREL **STATE:** MD **ZIP:** 20724

Location: 3510 Ft.Meade Rd.

Inspection Type: Other Action

Inspection Results:

Corrective Action Taken:

NPDES Inspections.
While performing illicit discharge inspections the following items were noted.
Found results same as KCI Technologies Inc. Inspection dated Sept.27,2007.
Walked site with Danny Sauro,car wash water is not all caught in drain.Detergent laden water flowing across parking lot and off the site.
No Stormwater Management was found on site.

Received By: _____

I hearby acknowledge of this report by my signature which does not imply agreement or disagreement with its content.

Inspector: DAVE MCNICHOLAS

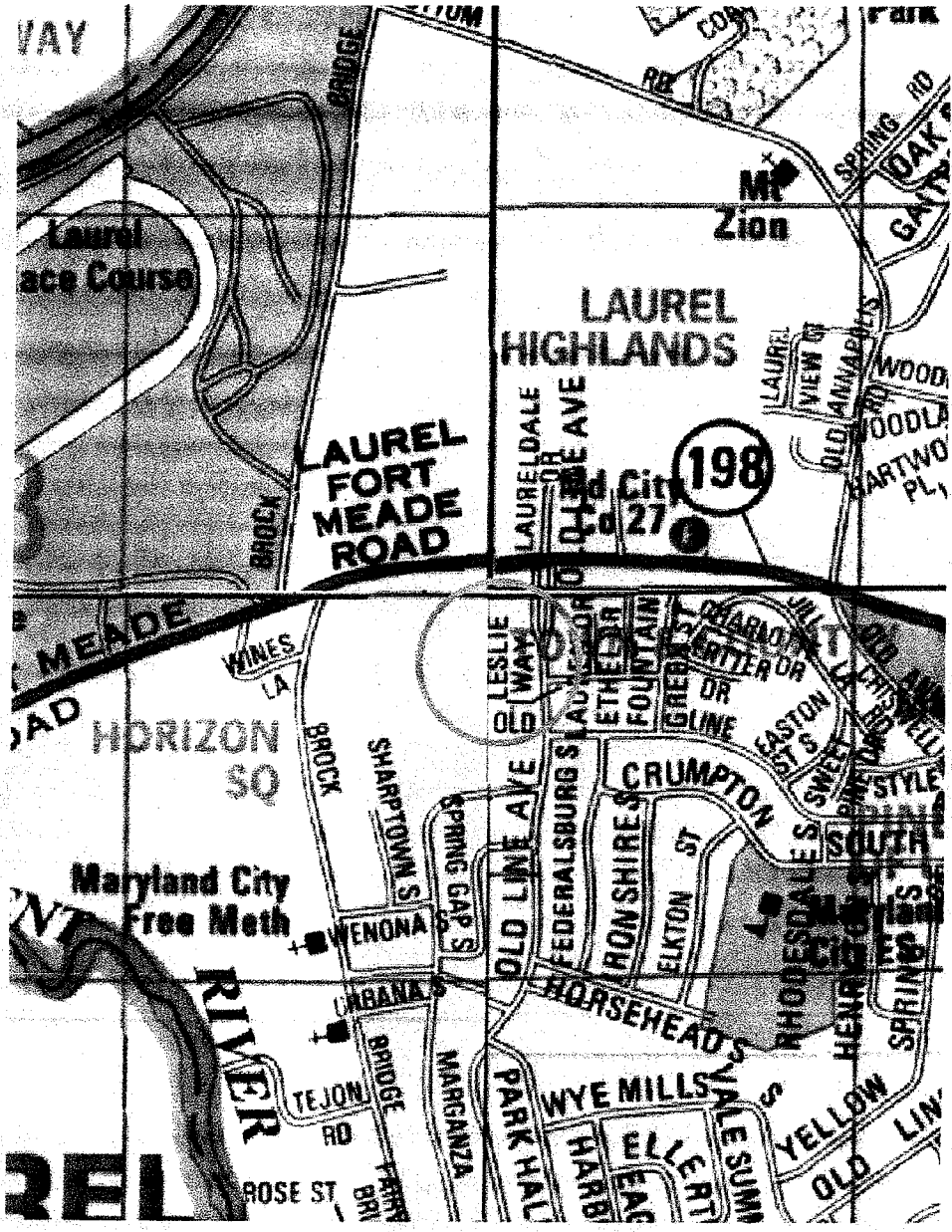
SIC Code #5511, Has Coverage Under General Permit
Not In Compliance With Pollution Prevention Plan. Referred
To MDE Area Inspector Nidine St Carrie

NPDES # 5

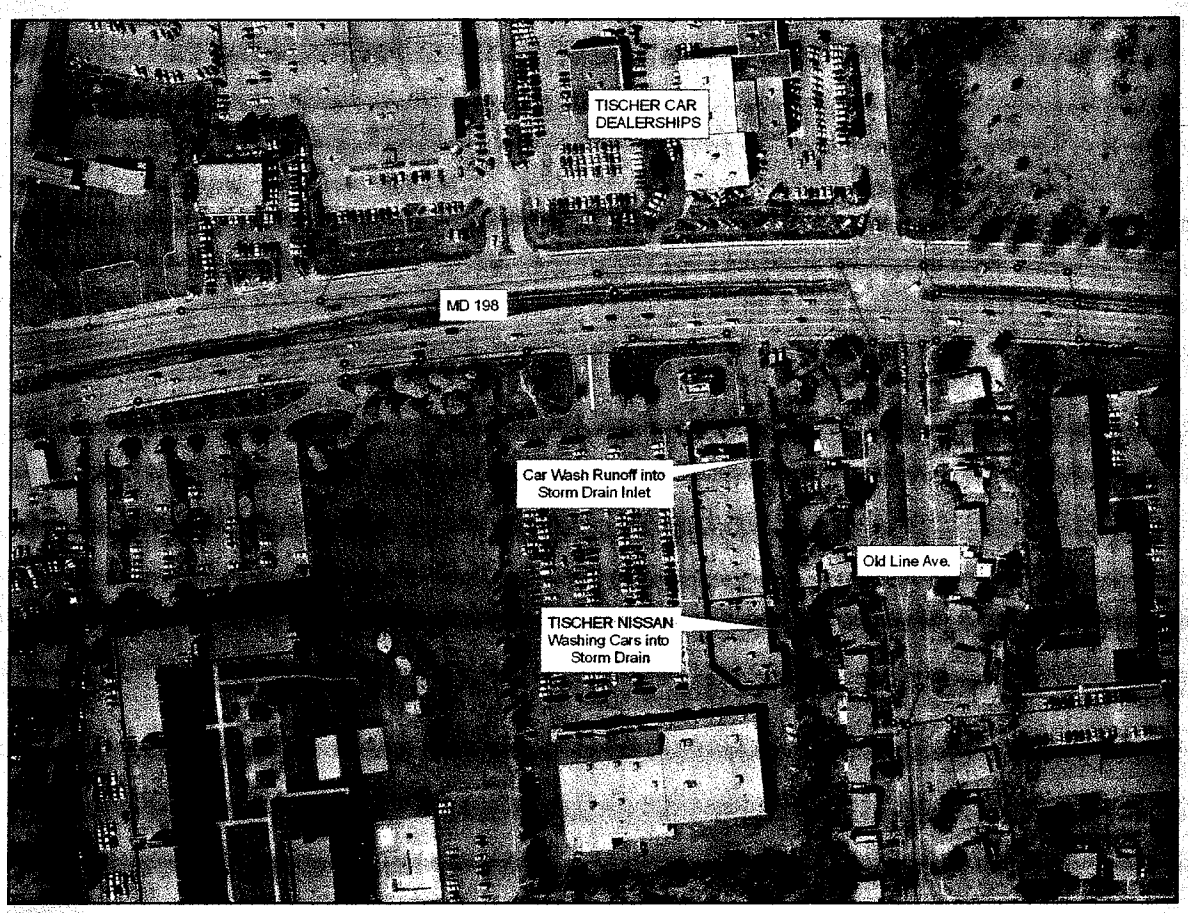
Upland Pollutant Source #5

On October 16, 2007, while performing illicit discharge inspections for Anne Arundel County, KCI Technologies, Inc. discovered a car washing station for Tischer Nissan located behind a strip mall along MD 198. At the time of inspection no car washing was taking place; however, all of the supplies and cleaners were present along with wet pavement. Foam and very turbid water was noted in standing pools of water on the pavement. The car washing runoff was noted flowing down the pavement to a storm drain inlet. The pavement was stained where the water had already dried. Based on field observations, the strip mall was lacking storm water treatment devices allowing the car wash runoff to be transported to an adjoining SHA storm drain system which outfalls to a stream channel. No water samples were collected.

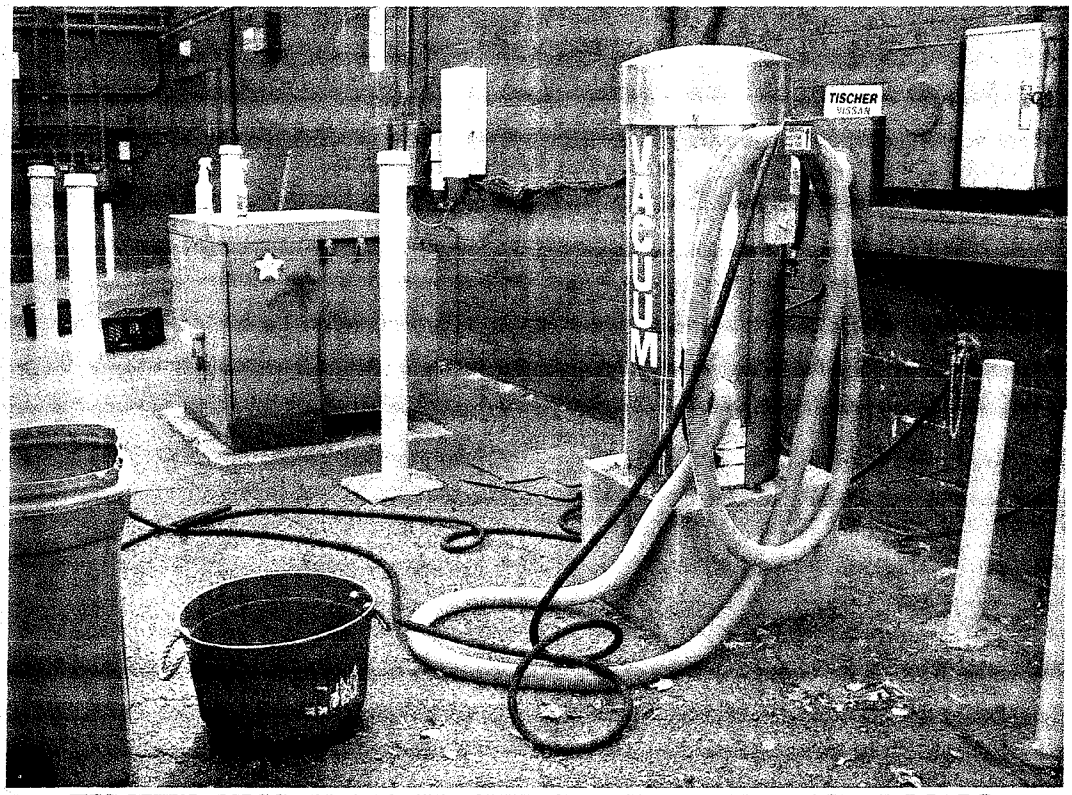
LOCATION: Behind a strip mall located off of MD 198, next to Old Line Avenue. ADC 11-A1



ADC MAP

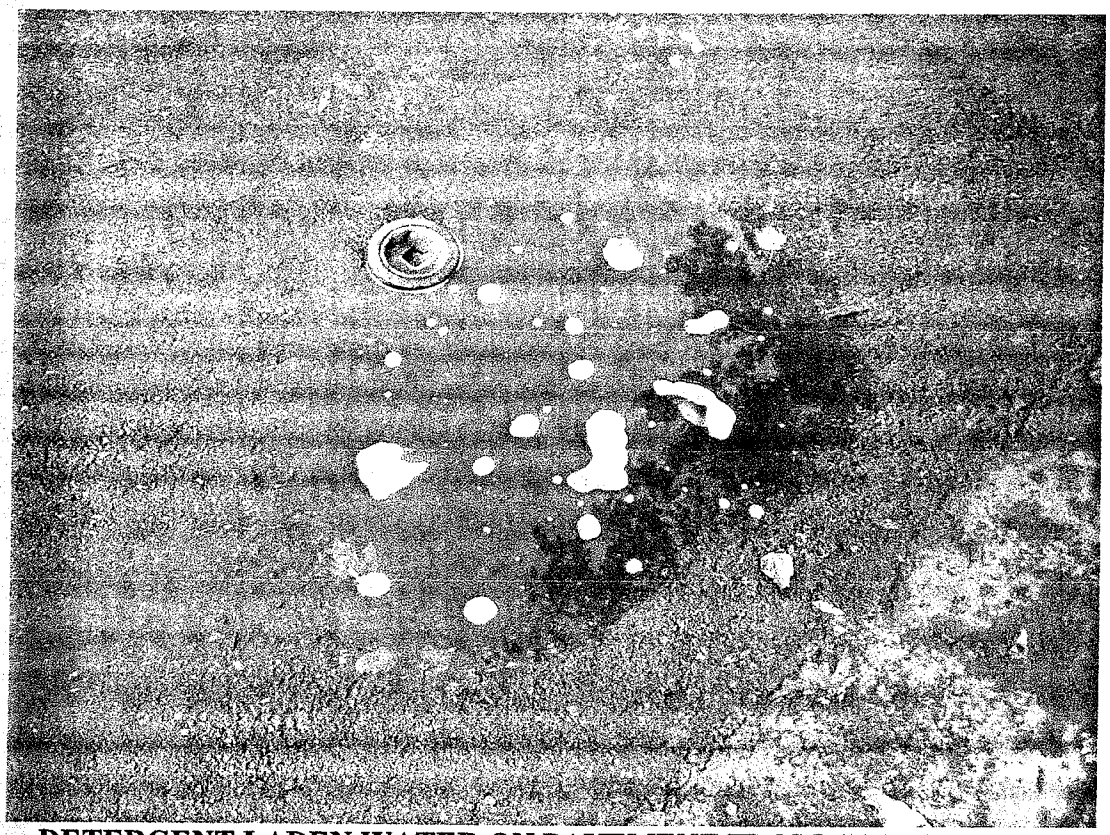


LOCATION MAP



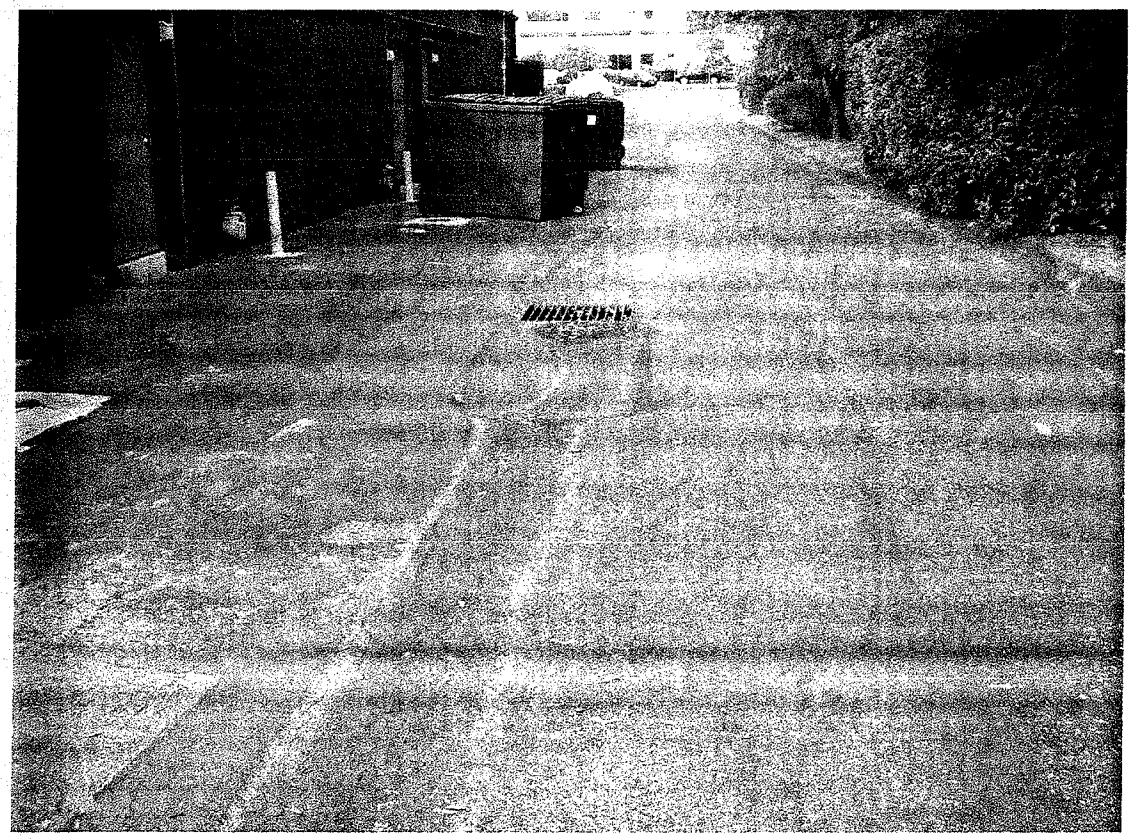
TISCHER NISSAN CAR WASHING AREA BEHIND STRIP MALL

TISCHER NISSAN CAR WASHING AREA BEHIND STRIP MALL – WET PAVEMENT FROM WASHING

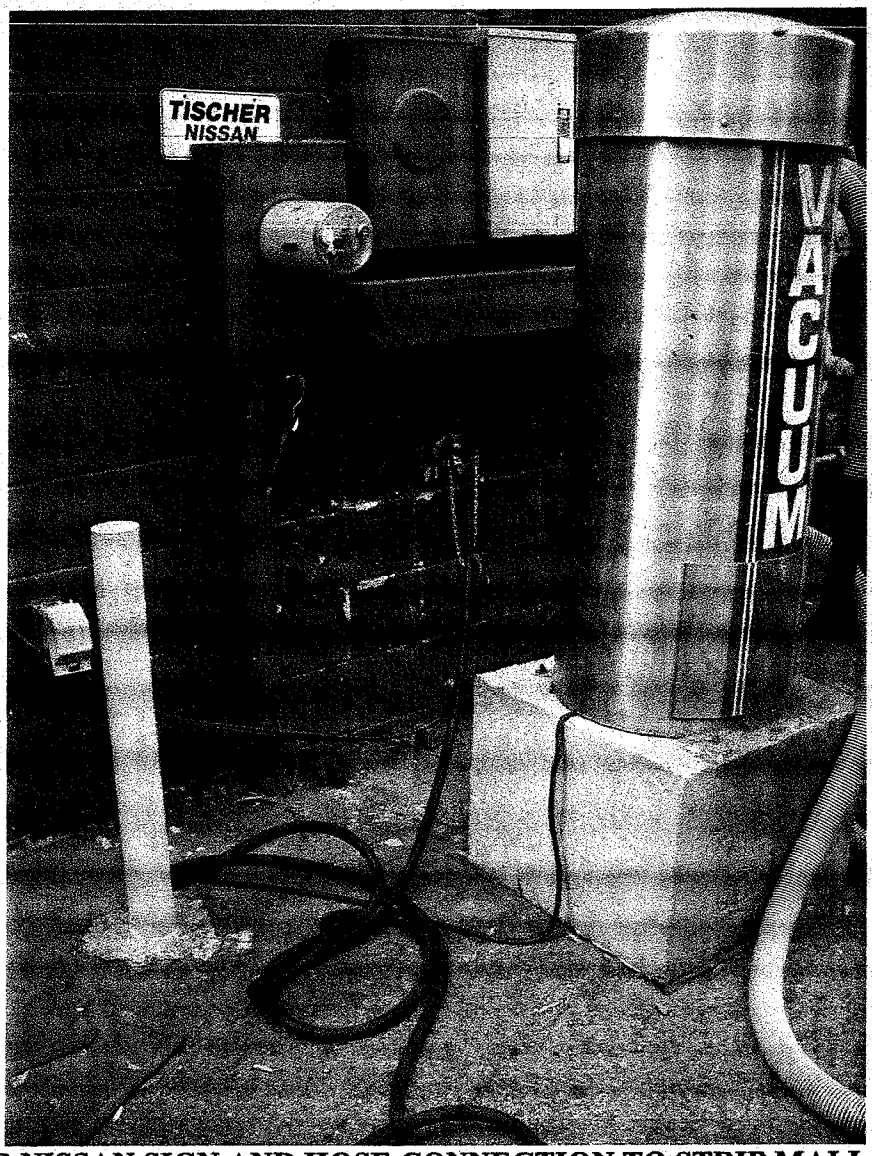


DETERGENT LADEN WATER ON PAVEMENT FROM CAR WASHING

RUNOFF FROM CAR WASHING FLOWING TO STORMDRAIN INLET



RUNOFF FROM CAR WASHING FLOWING TO STORMDRAIN INLET – STAIN ON PAVEMENT



TISCHER NISSAN SIGN AND HOSE CONNECTION TO STRIP MALL WHERE WASHING IS OCCURRING

ANNE ARUNDEL COUNTY
MARYLAND

Department of Inspections and Permits
Heritage Office Complex
2664 Riva Road
Annapolis, MD 21401
410-222-7780

Infrastructure and Environmental Programs Inspection Report

To Contact this Inspector, Telephone: 40-222-7768

Inspection Date: 11/15/2007 **TIME:** 1111 **PERMIT** NPDES5 **SWMA:**

AASCD Name:

OWNER/Permitee Name: Tischer Nissan #301-498-3322

Address: 3510 Ft.Meade Road **CITY:** LAUREL **STATE:** MD **ZIP:** 20724

Location: Rt.198 + Old Line Ave behind strip mall.

Inspection Type: Other Action

Inspection Results:

Corrective Action Taken:

NPDES Inspections.
While performing illicit discharge inspections the following items were noted.
Same results found that KCI Technologies Inc.dated Oct.16,2007 revealed.
Car wash station for Tischer Nissan found with detergent laden water flowing directly to inlet.

Received By: _____

I hearby acknowledge of this report by my signature which does not imply agreement or disagreement with its content.

Inspector: DAVE MCNICHOLAS

SIC Code # 5511 Referred To Nadene St Parrie For Enforcement Of Pollution Prevention Plan Associated With Their NOI For The General NPDES Permit For Industrial Site Runoff Along With Tischer & Orrsmann UW

Exhibit L
Crownsville Yard Stormwater Pollution Prevention Plan

MK 12/9/08

Storm Water Pollution Prevention Plan
Municipal Highway Garage

Facility Name: Central District Roads – Crownsville Yard

Facility Address: 1847 Crownsville Road

Annapolis, Maryland 21401

1. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) OVERVIEW

This Storm Water Pollution Prevention Plan:

- identifies the SWPPP coordinator with a description of the coordinator's duties;
- identifies members of the SWPPP team and lists their responsibilities;
- describes the facility, with information on location and activities, a site map, and a description of the storm water drainage system;
- identifies potential storm water contaminants;
- describes storm water management controls and various Best Management Practices (BMPs) needed to reduce pollutants in storm waster discharges;
- describes the facility's monitoring plan; and,
- describes the implementation schedule and provisions for amendment of the plan.

2. PLANNING AND ORGANIZATION

2.1. SWPPP Coordinator and Team

This is the member roster and list of responsibilities for the pollution prevention team. The team is responsible for implementing the Storm Water Pollution Prevention Plan.

Leader: Curtis Holly Office Phone: 410-222-7940

Title: Acting District Superintendent

Responsibilities:

Coordinate all stages of plan development, inspections and implementation; coordinate employee training programs; keep all records and ensure that reports are submitted; oversee sampling program.

Member: Clark Rosendale Office Phone: 410-222-1384

Title: Road Operations Supervisor Cell Phone/Beeper # 443-336-4532

Responsibilities:

Implement the preventive maintenance program; oversee good housekeeping activities; serves as spill response coordinator.

Member: Leroy Patterson Office Phone: 410-222-1098

Title: Road Maintenance Supervisor

Responsibilities:

Conduct/assist with inspections and training program.

3. ASSESSMENT

3.1. Site Description

Instructions: Show your facility's location on a general location map & include with your SWPPP. Describe activities at your site. Include the following information:
- facility address
- number of acres
- number of buildings & what they are used for
- number and type of vehicles (truck, backhoe, grader, etc.)
- number and location of outfalls (outfalls are point discharges to a surface water or storm drain))

If the following activities take place at your site, specify in the description:
- vehicle washing
- vehicles fueling
- sand/salt storage

The Crownsville yard is located at 1847 Crownsville Road, Annapolis, Anne Arundel County, MD. The Site Map (Attachment 1) shows the location of the facility. The facility covers 2.7 acres, has 2 buildings – 2 sheds for materials storage, a sand/salt storage shed, and a 1 bay garage with an office -- and maintains 10 dump trucks, 4 pick up trucks, 1 backhoe and 1 loader. There is a fueling station at the facility. Vehicle washing is done outdoors. There are two outfalls, one to an infiltration inlet and the other to the storm water management pond.

3.2. Site Map

Attachment 1 is a map of the facility, showing potential sources of pollution.

3.3. Significant Material Inventory

Materials used by this facility and activities that are exposed to storm water runoff are listed in Attachment 2.

3.4. Vehicle Wash Water and Wastewater

Vehicle washing takes place outdoors in a designated area. Wash water runs off as sheet flow to a sand filter area. No steam cleaning is allowed.

Steam cleaning is completed at another facility equipped with a vehicle wash.

3.5. Salt Storage

Our salt storage pile is covered or enclosed by a building, except when adding or removing materials from the pile.

3.6 Spills and Leaks

There have been no significant spills or chronic leaks at this facility in the past 3 years. Please note, the fuel tanks at this facility are managed by Fuel Room personnel in the Central Garage, part of the Anne Arundel County Office of Central Services.

3.7 Non-Storm Water Discharges

Non-storm water discharges at this facility could include leaking fire or yard hydrants (potable water), leaking suppression tanks, burst pipes caused by freezing temperatures, or the use of potable water for street sweeping, or washing buildings from time to time though this is not a standard operation.

3.8 Allowable Non-Storm Water Discharges

All allowable non-storm water discharges are identified on the site map.

3.9. Existing Storm Water Monitoring Data

The Crownsville yard has no historical monitoring data.

3.10. Site Summary (Sources of pollution with a high risk of contaminating storm water)

3.10. Site Summary (Sources of pollution with a high risk of contaminating storm water)

Instructions: This summary is an important piece of the SWPPP and will help you identify the areas, activities and/or materials which pose a high risk of contaminating storm water. With this information, you can select the most appropriate method to prevent or minimize pollution from these areas. Each area or activity where storm water pollution is prevented or minimized reduces the size of the SWPPP and the effort needed to implement it. If all industrial materials and activities are minimized you may qualify for the "No Exposure" exemption. The summary must:

< describe activities with a high potential to contaminate storm water.
< describe any pollutants that may be associated with these activities.

In the example below and in attachment 2a, use the ones applicable to your facility, and include others you may have.

Example: The following areas are potential sources of contamination:

< Vehicle washing and equipment washing. Residue on the ground from washing activities may contaminate storm water.
< Sand/salt. The sand/salt pile is not covered. Storm water from this area can be potentially contaminated by salt and sand.

Attachment 2a summarizes the above information by potential pollution source.

4. IMPLEMENTATION

This section describes practices that are in place or that will be implemented to control pollutants that have the potential to contaminate storm water.

4.1. Good Housekeeping

The following is a list of good housekeeping practices followed at this facility:

- Run-off from washing of equipment or vehicles drain to the sand filter.
  Spills are immediately cleaned up with an absorbent. (See Spill Prevention and Response Procedures in Section 4.7)
- All fluid products and wastes are kept indoors.
- Waste oil stored in drums outside are kept closed except when filling.
- Used antifreeze is kept in a covered container.
- All changing of fluids is done indoors in the maintenance garage.
- Spillage occurring during additional or removal from salt storage piles or sand and salt pile mixing, are promptly cleaned up.
- Spigots/funnels are used to minimize drips/leaks.
- Drip pans are used when changing fluids.

The following is a list of good housekeeping practices that will be implemented, along with expected date of implementation, at this facility.

4.2. Preventive Maintenance

The following is a list of preventive maintenance procedures practiced at this facility:

- Most staff is aware of spill prevention and response procedures.
- Spill response equipment is located at all potential spill areas. (Oil Absorbent)
- All transfers to and from the tank are observed by qualified personnel trained in spill response procedures.
- Catch basins and sediment chambers are checked and cleaned as needed.
- Drainage swales are kept clear.
- Settling basins are cleaned out as necessary.
- Underground storage tank filling areas are inspected regularly for signs of spills.
- Hydraulic equipment is kept in good repair to prevent leaks.
- Outdoor drum and storage tank containment areas are checked for leaks.
- Uncontaminated storm water in containment areas is kept to a minimum.
- Fueling areas are inspected for signs of spills or leaks and proper labeling. Hoses and fittings
- are inspected regularly.
- Above ground storage tanks are inspected regularly for signs of corrosion or leaks.
- All materials, waste storage areas, drains, tanks and cans are properly labeled.

The following is a list of preventive maintenance measures that will be implemented and the date by which they will be implemented.

- Within 30 days make the rest of the staff aware of spill prevention and response procedures.
- Within 10 days additional spill response kit will be purchased

4.3. Best Management Practices (BMPs)

The following is a list of existing and planned Best Management Practices. When implemented, the BMPs will prevent or reduce the discharge of potential pollutants in storm water runoff for each area of concern listed in the Site Summary (Section 3.9).

Loading and unloading areas. To prevent or reduce the potential of storm water contamination in the loading and unloading areas, the following BMPs will be implemented.

- Loading and unloading are done inside where possible.
- Hazardous materials that are in easily ripped or breakable containers (such as bags, plastic pails) are not loaded or unloaded outside when it rains.
- A staff member is present during loading and unloading operations.
- Within 10 days, an emergency spill kit will be placed in the loading/unloading area.

Outdoor storage

- Scrap metal. Scrap metal with hazardous materials is not handled at this location pile.

4.4. Sediment and Erosion Control

There are no potential areas for erosion on this site.

4.5. Management of Storm Water Runoff

The following management practices for runoff are used at this facility.

- Runoff from the site goes to a sand filter.

4.6. Spill Prevention and Response

Loading/unloading area:

- Spill response equipment is kept in the mechanic shop and includes 3-40 pound bags of oil absorbent. All personnel are instructed in its location and use.
- The pollution prevention team leader or the spill coordinator will be advised immediately of all spills of hazardous materials or regulated materials, regardless of quantity.
- Spills will be evaluated to determine the necessary response. If there is a health hazard, fire or explosion potential, 911 will be called. If a spill is large or threatens surface waters, including storm drains, state or federal emergency response agencies will be called.
- Spills will be contained as close to the source as possible with a dike of absorbent materials from the emergency spill kit. Additional dikes will be constructed to protect swales or other storm water conveyances of streams. A cover or dike will protect any other storm water structures such as catch basins.

4.7. Employee Training

Instructions: A storm water pollution prevention employee training program must be developed. The training must cover such topics as spill prevention and response, good housekeeping, and materials management practices. Keep the attendance sheet with this plan. Attachment 7 is a sample attendance sheet for the employee training session(s). Storm water training can be combined with other training such as health, safety or emergency response. You may already conduct training, such as hazardous materials handling or MSDS, that could fulfill parts of this requirement.

Example: The topics below will be covered at employee training sessions. All employees will be trained annually. (Specify the topics here.)

Pollution prevention team members will meet at least twice a year to discuss the effectiveness of and improvements to the Plan.

5. EVALUATION

5.1. Quarterly Visual Monitoring

Instructions: Every quarter you must **visually** examine the storm water discharges at each outfall at your facility. The visual examination must be made during daylight hours and within 30 minutes after storm water begins to runoff. Document observed contamination/problems with date and time. Determine the source of contamination and take action to eliminate it. A sample quarterly monitoring log is shown in Attachment 4.

5.2. Annual Site Inspections (Comprehensive Site Compliance Evaluation)

Instructions: You must **inspect** your entire facility at least **once a year.** You must inspect for evidence of pollution, evaluate BMPs that have been implemented, and inspect equipment. The site inspection report must include date of inspection, name of personnel conducting the inspection, observations, assessment of BMP's, corrective actions taken, and a signed certification.

Instructions: You must include this information in a Compliance Evaluation Report. Keep the Report with your SWPPP. Both the Evaluation Report and any reports of follow-up action must be certified. Certification language: "This Compliance Evaluation Report has been prepared by qualified personnel who properly gathered and evaluated information submitted for this Report. The information in this Report, to the best of my knowledge, is accurate and complete." Remember to sign and date the certification.

5.3. Recordkeeping and Reporting

Instructions: Your facility must maintain records of spills, leaks, inspections and maintenance activities for at least one year after the permit expires.

Example: Records described in this SWPPP will be retained on site for 5 years from the date of the cover letter that notifies this facility of coverage under the storm water permit. These records will be made available to state or federal inspectors upon request. Additionally, employee training records shall also be maintained.

5.4. Plan Revisions

Instructions: Changes in a facility's layout or operations require changes in the Storm Water Pollution Prevention Plan. Describe how changes/revisions to the SWPPP will be made.

Example: If this facility expands its operations, or changes any significant material handling or storage practices which could impact storm water, this SWPPP will be amended. The amended Plan will describe the new activities that contribute to increased pollution and planned control measures.

This Plan will also be amended if a state or federal inspector determines that it is not effective in controlling storm water pollutants discharged to waterways.

6. CERTIFICATIONS

Instructions: Your certifications must be signed by an "authorized representative," someone who is at or near the top of your facility's management chain who has the authority to sign and certify this type of document. Modify the certifications as needed.
Instructions: This page include certifications for your:

- Non-Storm Water Discharges
- Storm Water Pollution Prevention Plan

Non-Storm Water Discharges

All storm water outfalls to surface waters at this facility have been evaluated and found to be free of non-storm water discharges.

Storm Water Pollution Prevention Plan

This Storm Water Pollution Prevention Plan has been prepared in accordance with good engineering practices. Qualified personnel properly gathered and evaluated information submitted for this Plan. The information in this Plan, to the best of my knowledge, is accurate and complete.

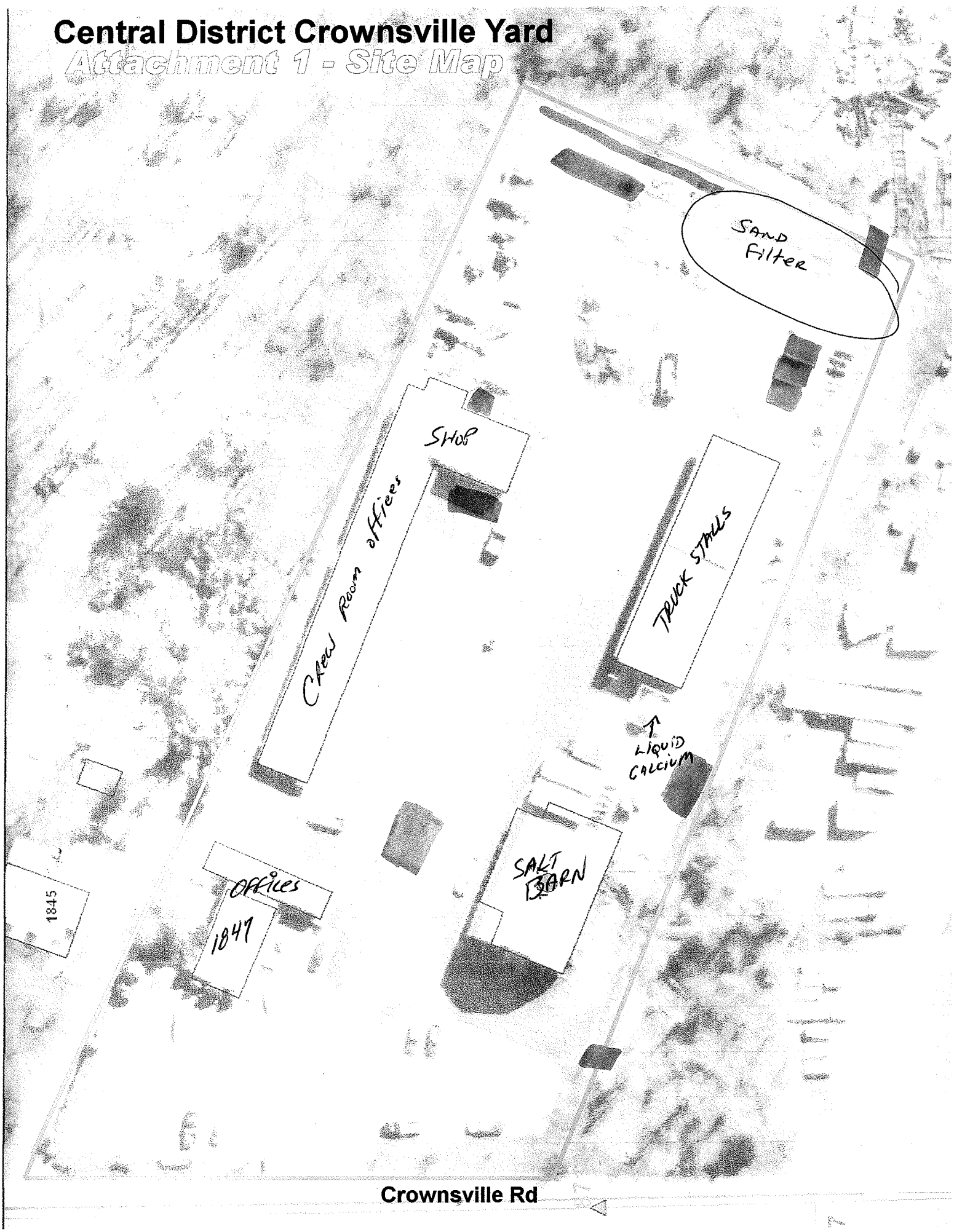
Curtis Holley
Name

Acting Superintendant
Title

12-5-08
Date

Central District Crownsville Yard

Attachment 1 - Site Map



Attachment 2
SWPPP Material Inventory

Instructions: Develop an inventory of any materials or activities that are **exposed to storm water**. This attachment is a partial list of materials commonly exposed to storm water. Fill in the ones found at your facility. Include any others that you may have. These areas must be identified on the site map. Make sure you fill in the columns. We've filled in a few for you.

Material	Activity/ Use	Quantity stored (tank size if applicable: above or below ground)	Pollutant	Likelihood of contact with storm water? (Low, medium or high)	Comments
Gasoline	storage	5k gal.below ground	oily sheen	low	
Gasoline	vehicle fueling	NA	oily sheen	high	spill absorbents available. No roof.
Diesel Fuel	Vehicle Fueling		oily sheen	High	" "
Vehicles/Equipment	Washing	N/A	Salt, grease, oil-detergent	High	" "
Vehicles Equipment	Storage	N/A	Oil, hydraulic fluid, radiator fluid	Medium	
Salt	Snow Removal	2,000 max	Run-Off	High	Covered or in Barn
Salt/Sand Mix	Snow Removal	200 ton max	Run-Off	High	Covered
Masonry Sand	Storm Drain Repair	20-ton max	Silt Run-Off	High	Covered
Cold Mix	Patching pot-holes	20-ton max	Oily Sheet	high -	Covered
Top Soil	Road-side maintenance	250-ton max	Silt Run-Off	High	Stored off hardpan
CR6-8	Road maintenance	500-ton max	Silt Run-Off	High	Stored off hardpan
Fill Dirt	Road maintenance	500-ton max	Silt Run-Off	High	Stored off hardpan
Liquid Calcium	Snow Removal	5,5k Gal Mix		Medium	Concrete Containment System

Completed by: **Curtis Holly**
Title: **Acting Superintendent**
Date: **12-5-2008**

Attachment 2a
Site Summary (Activities with a High Risk of Contaminating Storm Water)

Instructions: List activities with a high risk of contaminating storm water. Describe pollutants that may be associated with these activities. This attachment shows examples. List activities that have a high potential of contaminating storm water at your facility. Examples are shown below. Modify to show your activities, pollutants and current and future practices.

Activity	Pollutants	Current Practices	Future Practices
Vehicle/equipment washing	Sand, salt, detergents, grease	In designated wash area outdoors with run-off to sand filters	No Change
Salt/sand Mix	Salt and sand	Covered with tarp	Cover with tarp
Salt	Salt run-off	Kept in barn	No Change
Masonry Sand	Silt run-off	Cover with tarp	No Change
Cold Mix	Oily film	Cover with tarp	No Change
Gasoline	Oily sheen	Spill absorbents available	No Change
Diesel Fuel	Oily Sheen	Spill absorbents available	No Change
Topsoil	Silt run-off	Stored off hard surface	No Change
CR6-8	Silt run-off	Stored off hard surface	No Change
Fill dirt	Silt run-off	Stored off hard surface	No Change

Important Note: Important Note: Each material storage area or activity that is protected from precipitation or storm water runoff reduces the level of effort the facility must do to comply with the MSGP. Facilities that protect all materials and activities from storm water can qualify for the No Exposure.

Completed by: **Curtis Holly**
Title: **Acting Superintendent**
Date: **12-5-2008**

Attachment 3
List of Significant Spills (> 5 gallons) and Chronic Leaks

Instructions: List significant (> 5 gallons) spills of oils, toxic or hazardous materials that have occurred in the last 3 years. Show these areas on the site map.

Date	Spill	Leak	Source	Description			Response Procedures	Measures Taken to Prevent Reccurrence
	(check one)			Type of Material	Quantity	Reason		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Completed by: **Curtis Holly**
Title: **Acting Superintendent**
Date: **12-5-2008**

Attachment 4
Sample Quarterly Visual Monitoring Inspection Log for Storm Water Pollution

Instructions: Every quarter you must visually inspect storm water outfalls at your facility. This attachment is a sample monitoring log.

Date	Time	Outfall Number or Description	Weather Conditions	Observations (contaminants observed/ erosion/sediment runoff	Probable Source of Any Observed Contamination	Action Taken to Prevent in Future
12-52008	Noon	SWM Pond	Dry	Everything Looked Good	N/A	N/A

Completed by: **Curtis Holly**
Title: **Acting District Superintendent**
Date: **12-5-2008**

Exhibit M
Odenton Yard Stormwater Pollution Prevention Plan

MK 12/9/08

Storm Water Pollution Prevention Plan
Municipal Highway Garage

Facility Name: Central District Roads – Odenton Yard (formerly Western District)

Facility Address: 1427 Duckens Street

Odenton, Maryland 21113

1. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) OVERVIEW

This Storm Water Pollution Prevention Plan:

- identifies the SWPPP coordinator with a description of the coordinator's duties;
- identifies members of the SWPPP team and lists their responsibilities;
- describes the facility, with information on location and activities, a site map, and a description of the storm water drainage system;
- identifies potential storm water contaminants;
- describes storm water management controls and various Best Management Practices (BMPs) needed to reduce pollutants in storm waster discharges;
- describes the facility's monitoring plan; and,
- describes the implementation schedule and provisions for amendment of the plan.

2. PLANNING AND ORGANIZATION

2.1. SWPPP Coordinator and Team

This is the member roster and list of responsibilities for the pollution prevention team. The team is responsible for implementing the Storm Water Pollution Prevention Plan.

Leader: Curtis Holly Office Phone: 410-222-7940

Title: Acting District Superintendent

Responsibilities:

Coordinate all stages of plan development, inspections and implementation; coordinate employee training programs; keep all records and ensure that reports are submitted; oversee sampling program.

Member: Clark Rosendale Office Phone: 410-222-1384

Title: Road Operations Supervisor Cell Phone/Beeper # 443-336-4532
Responsibilities:

Implement the preventive maintenance program; oversee good housekeeping activities; serves as spill response coordinator.

Member: Leroy Patterson Office Phone: 410-222-1098

Title: Road Maintenance Supervisor

Responsibilities:

Conduct/assist with inspections and training program; conduct sampling.

3. ASSESSMENT

3.1. Site Description

Instructions: Show your facility's location on a general location map & include with your SWPPP. Describe activities at your site. Include the following information:
- facility address
- number of acres
- number of buildings & what they are used for
- number and type of vehicles (truck, backhoe, grader, etc.)
- number and location of outfalls (outfalls are point discharges to a surface water or storm drain)

If the following activities take place at your site, specify in the description:
- vehicle washing
- vehicles fueling
- sand/salt storage

The Odenton yard is located at 1427 Duckens Street, Odenton, Anne Arundel County, MD. The Site Map (Attachment 1) shows the location of the facility. The facility covers 3.1 acres, has 2 buildings – 3 sheds for materials storage, a sand/salt storage barn, and a 5 bay garage with an office -- and maintains 9 dump trucks, 4 pick up trucks, 2 backhoes, 3 roadside mowers, 2 loaders, 1 gradall, 1 vactor. There is a fueling station at the facility. Vehicle washing is done indoors. There are two outfalls, both to Storm Water Maintenance Ponds.

3.2. Site Map

Attachment 1 is a map of the facility, showing potential sources of pollution.

3.3. Significant Material Inventory

Materials used by this facility and activities that are exposed to storm water runoff are listed in Attachment 2.

3.4. Vehicle Wash Water and Wastewater

Vehicle washing takes place outdoors in a designated area. Wash water runs off into grit oil separator over into a sand filter.
No steam cleaning is allowed.

3.5. Salt Storage

Our salt storage pile is covered or enclosed by a building, except when adding or removing materials from the pile.

3.6 Spills and Leaks

There have been no significant spills or chronic leaks at this facility in the past 3 years. Please note, the fuel tanks at this facility are managed by Fuel Room personnel in the Central Garage, part of the Anne Arundel County Office of Central Services.

3.7 Non-Storm Water Discharges

Non-storm water discharges at this facility could include leaking fire or yard hydrants (potable water), leaking suppression tanks, burst pipes caused by freezing temperatures, or the use of potable water for street sweeping, or washing buildings from time to time though this is not a standard operation.

3.8 Allowable Non-Storm Water Discharges

All allowable non-storm water discharges are identified on the site map.

3.9. Existing Storm Water Monitoring Data

The Odenton yard has no historical monitoring data.

3.10. Site Summary (Sources of pollution with a high risk of contaminating storm water)

3.10. Site Summary (Sources of pollution with a high risk of contaminating storm water)

Instructions: This summary is an important piece of the SWPPP and will help you identify the areas, activities and/or materials which pose a high risk of contaminating storm water. With this information, you can select the most appropriate method to prevent or minimize pollution from these areas. Each area or activity where storm water pollution is prevented or minimized reduces the size of the SWPPP and the effort needed to implement it. If all industrial materials and activities are minimized you may qualify for the "No Exposure" exemption. The summary must:

< describe activities with a high potential to contaminate storm water.
< describe any pollutants that may be associated with these activities.

In the example below and in attachment 2a, use the ones applicable to your facility, and include others you may have.

Example: The following areas are potential sources of contamination:

< Vehicle washing and equipment washing. Residue on the ground from washing activities may contaminate storm water.
< Sand/salt. The sand/salt pile is not covered. Storm water from this area can be potentially contaminated by salt and sand.
< Compost. The compost pile is not covered and runoff from the area discharges to a wetland.

Attachment 2a summarizes the above information by potential pollution source.

4. IMPLEMENTATION

This section describes practices that are in place or that will be implemented to control pollutants that have the potential to contaminate storm water.

4.1. Good Housekeeping

The following is a list of good housekeeping practices followed at this facility:

- Run-off from washing of equipment or vehicles drain to the sand filter.
- Spills are immediately cleaned up with an absorbent. (See Spill Prevention and Response Procedures in Section 4.7)
- All fluid products and wastes are kept indoors.
- Waste oil stored in drums outside are kept closed except when filling.
- Used antifreeze is kept in a covered container.
- All changing of fluids is done indoors in the maintenance garage.
- Spillage occurring during additional or removal from salt storage piles or sand and salt pile mixing, are promptly cleaned up.
- Spigots/funnels are used to minimize drips/leaks.
- Drip pans are used when changing fluids.

4.2. Preventive Maintenance

The following is a list of preventive maintenance procedures practiced at this facility:

- Most staff is aware of spill prevention and response procedures
- Spill response equipment is located at all potential spill areas. (Oil Absorbent)
- All transfers to and from the tank are observed by qualified personnel trained in spill response procedures.
- Catch basins and sediment chambers are checked and cleaned as needed.
- Drainage swales are kept clear.
- Settling basins are cleaned out as necessary.
- Underground storage tank filling areas are inspected regularly for signs of spills.
- Hydraulic equipment is kept in good repair to prevent leaks.
- Outdoor drum and storage tank containment areas are checked for leaks.
- Uncontaminated storm water in containment areas is kept to a minimum.
- Other testing and maintenance of equipment and systems. Please specify.

The following is a list of preventive maintenance measures that will be made:

- Within 30 days, the rest of the staff will be made aware of the spill prevention and response procedures.
- Within 10 days, additional sill response kit will be purchased.

4.3. Best Management Practices (BMPs)

The following is a list of existing and planned Best Management Practices. When implemented, the BMPs will prevent or reduce the discharge of potential pollutants in storm water runoff for each area of concern listed in the Site Summary (Section 3.9).

Loading and unloading areas. To prevent or reduce the potential of storm water contamination in the loading and unloading areas, the following BMPs will be implemented.

- Loading and unloading are done inside where possible.
- Hazardous materials that are in easily ripped or breakable containers (such as bags, plastic pails) are not loaded or unloaded outside when it rains.
- A staff member is present during loading and unloading operations.
- Within 10 days, an emergency spill kit will be placed in the loading/unloading area.

Outdoor storage

- Scrap metal. Scrap metal with hazardous materials is not handled at this location.
- Dumpster lid is closed except when in use.

4.4. Sediment and Erosion Control

There are no potential areas for erosion on this site.

4.5. Management of Storm Water Runoff

The following management practices for runoff are used at this facility.

- Runoff from the site goes to a detention or retention basin.
- Biofilter/bioremediation is used to treat runoff.
- Other

4.6. Spill Prevention and Response

Loading/unloading area:

- Spill response equipment is kept in the shop and includes 3-40 pound bags of oil absorbent. All personnel are instructed in its location and use.
- The pollution prevention team leader or the spill coordinator will be advised immediately of all spills of hazardous materials or regulated materials, regardless of quantity.
- Spills will be evaluated to determine the necessary response. If there is a health hazard, fire or explosion potential, 911 will be called. If a spill is large or threatens surface waters, including storm drains, state or federal emergency response agencies will be called.
- Spills will be contained as close to the source as possible with a dike of absorbent materials from the emergency spill kit. Additional dikes will be constructed to protect swales or other storm water conveyances of streams. A cover or dike will protect any other storm water structures such as catch basins.

4.7. Employee Training

Instructions: A storm water pollution prevention employee training program must be developed. The training must cover such topics as spill prevention and response, good housekeeping, and materials management practices. Keep the attendance sheet with this plan. Attachment 7 is a sample attendance sheet for the employee training session(s). Storm water training can be combined with other training such as health, safety or emergency response. You may already conduct training, such as hazardous materials handling or MSDS, that could fulfill parts of this requirement.

Example: The topics below will be covered at employee training sessions. All employees will be trained annually. (Specify the topics here.)

Pollution prevention team members will meet at least twice a year to discuss the effectiveness of and improvements to the Plan.

5. EVALUATION

5.1. Quarterly Visual Monitoring

Instructions: Every quarter you must **visually** examine the storm water discharges at each outfall at your facility. The visual examination must be made during daylight hours and within 30 minutes after storm water begins to runoff. Document observed contamination/problems with date and time. Determine the source of contamination and take action to eliminate it. A sample quarterly monitoring log is shown in Attachment 4.

5.2. Annual Site Inspections (Comprehensive Site Compliance Evaluation)

Instructions: You must **inspect** your entire facility at least **once a year.** You must inspect for evidence of pollution, evaluate BMPs that have been implemented, and inspect equipment. The site inspection report must include date of inspection, name of personnel conducting the inspection, observations, assessment of BMP's, corrective actions taken, and a signed certification.

Instructions: You must include this information in a Compliance Evaluation Report. Keep the Report with your SWPPP. Both the Evaluation Report and any reports of follow-up action must

be certified. Certification language: "This Compliance Evaluation Report has been prepared by qualified personnel who properly gathered and evaluated information submitted for this Report. The information in this Report, to the best of my knowledge, is accurate and complete." Remember to sign and date the certification.

5.3. Recordkeeping and Reporting

Instructions: Your facility must maintain records of spills, leaks, inspections and maintenance activities for at least one year after the permit expires.

Example: Records described in this SWPPP will be retained on site for 5 years from the date of the cover letter that notifies this facility of coverage under the storm water permit. These records will be made available to state or federal inspectors upon request. Additionally, employee training records shall also be maintained.

5.4. Plan Revisions

Instructions: Changes in a facility's layout or operations require changes in the Storm Water Pollution Prevention Plan. Describe how changes/revisions to the SWPPP will be made.

Example: If this facility expands its operations, or changes any significant material handling or storage practices which could impact storm water, this SWPPP will be amended. The amended Plan will describe the new activities that contribute to increased pollution and planned control measures.

This Plan will also be amended if a state or federal inspector determines that it is not effective in controlling storm water pollutants discharged to waterways.

6. CERTIFICATIONS

Instructions: Your certifications must be signed by an "authorized representative," someone who is at or near the top of your facility's management chain who has the authority to sign and certify this type of document. Modify the certifications as needed.
Instructions: This page include certifications for your:

- Non-Storm Water Discharges
- Storm Water Pollution Prevention Plan

Non-Storm Water Discharges

All storm water outfalls to surface waters at this facility have been evaluated and found to be free of non-storm water discharges.

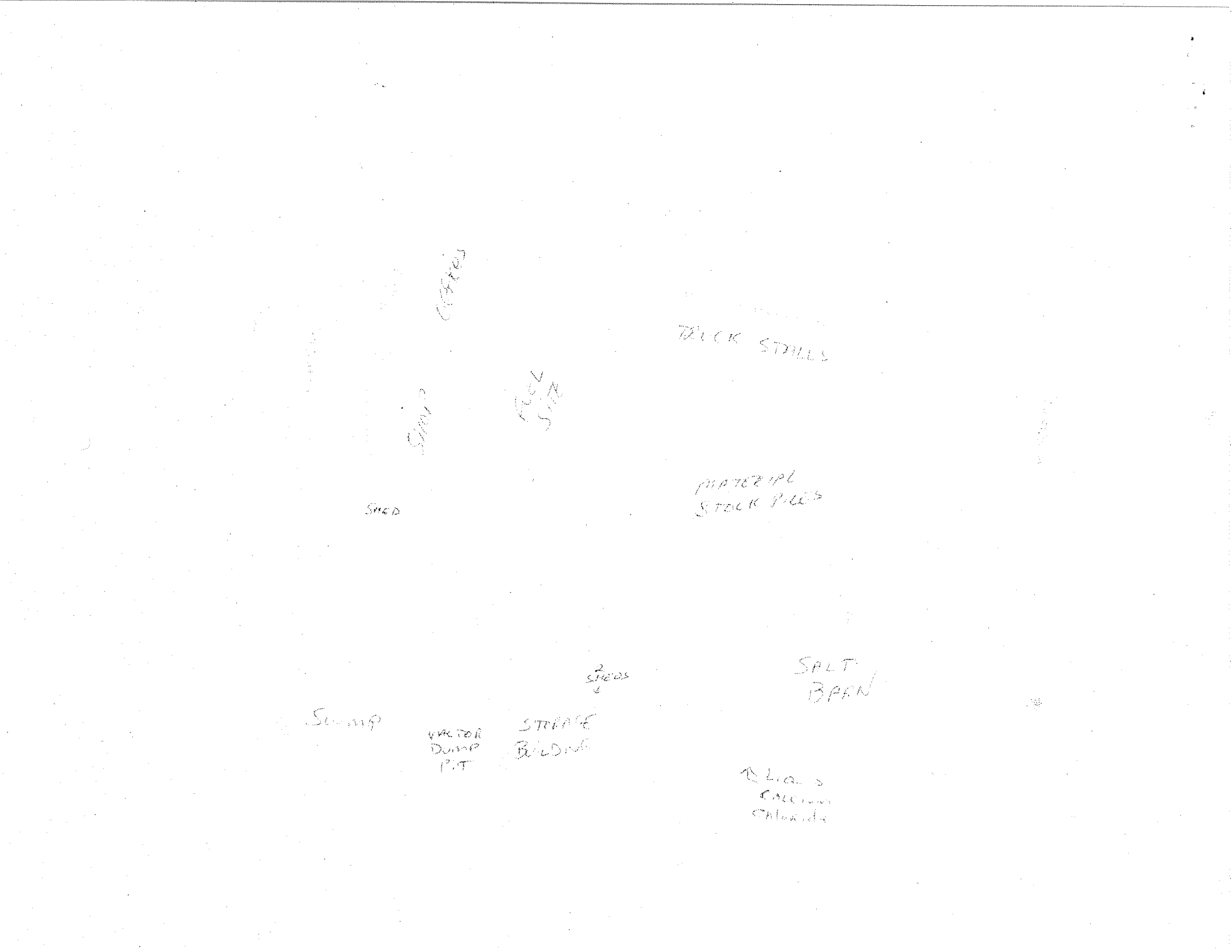
Storm Water Pollution Prevention Plan

This Storm Water Pollution Prevention Plan has been prepared in accordance with good engineering practices. Qualified personnel properly gathered and evaluated information submitted for this Plan. The information in this Plan, to the best of my knowledge, is accurate and complete.

Curtis Holley
Name

Acting Superintendant
Title

12-5-08
Date


BLOCK STORAGE
SALT BARN
STORAGE BUILDING
VACTOR DUMP PIT
SHED

Attachment 2
SWPPP Material Inventory

Instructions: Develop an inventory of any materials or activities that are **exposed to storm water**. This attachment is a partial list of materials commonly exposed to storm water. Fill in the ones found at your facility. Include any others that you may have. These areas must be identified on the site map. Make sure you fill in the columns. We've filled in a few for you.

Material	Activity/ Use	Quantity stored (tank size if applicable: above or below ground)	Pollutant	Likelihood of contact with storm water? (Low, medium or high)	Comments
Gasoline	storage	5k gal.below ground	oily sheen	low	
Gasoline	vehicle fueling	NA	oily sheen	high	spill absorbents available. No roof.
Diesel Fuel	Vehicle Fueling		oily sheen	High	" "
Vehicles/Equipment	Washing	N/A	Salt, grease, oil-detergent	High	" "
Vehicles Equipment	Storage	N/A	Oil, hydraulic fluid, radiator fluid	Medium	
Salt	Snow Removal	2,000 max	Run-Off	High	Covered or in Barn
Salt/Sand Mix	Snow Removal	200 ton max	Run-Off	High	Covered
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Cold Mix	Patching pot-holes	20-ton max	Oily Sheet	high -	Covered
Top Soil	Road-side maintenance	250-ton max	Silt Run-Off	High	Stored off hardpan
CR6-8	Road maintenance	500-ton max	Silt Run-Off	High	Stored off hardpan
Fill Dirt	Road maintenance	500-ton max	Silt Run-Off	High	Stored off hardpan
Liquid Calcium	Snow Removal	5,5k Gal Mix		Medium	Concrete Containment System
Waste Oil	Storage		Oily Sheen	Medium	Concrete Containment System

Completed by: **Curtis Holly**
Title: **Acting Superintendent**
Date: **12-5-2008**

Attachment 2a
Site Summary (Activities with a High Risk of Contaminating Storm Water)

Instructions: List activities with a high risk of contaminating storm water. Describe pollutants that may be associated with these activities. This attachment shows examples. List activities that have a high potential of contaminating storm water at your facility. Examples are shown below. Modify to show your activities, pollutants and current and future practices.

Activity	Pollutants	Current Practices	Future Practices
Vehicle/equipment washing	Sand, salt, detergents, grease	In designated wash area outdoors with run-off to sand filters	No Change
Salt/sand Mix	Salt and sand	Covered with tarp	Cover with tarp
Salt	Salt run-off	Kept in barn	No Change
Masonry Sand	Silt run-off	Cover with tarp	No Change
Cold Mix	Oily film	Cover with tarp	No Change
Gasoline	Oily sheen	Spill absorbents available	No Change
Diesel Fuel	Oily Sheen	Spill absorbents available	No Change
Topsoil	Silt run-off	Stored off hard surface	No Change
CR6-8	Silt run-off	Stored off hard surface	No Change
Fill dirt	Silt run-off	Stored off hard surface	No Change

Important Note: Important Note: Each material storage area or activity that is protected from precipitation or storm water runoff reduces the level of effort the facility must do to comply with the MSGP. Facilities that protect all materials and activities from storm water can qualify for the No Exposure.

Completed by: **Curtis Holly**
Title: **Acting Superintendent**
Date: **12-5-2008**

Attachment 3
List of Significant Spills (> 5 gallons) and Chronic Leaks

Instructions: List significant (> 5 gallons) spills of oils, toxic or hazardous materials that have occurred in the last 3 years. Show these areas on the site map.

Date	Spill	Leak	Source	Description			Response Procedures	Measures Taken to Prevent Reccurrence
	(check one)			Type of Material	Quantity	Reason		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Completed by: Curtis Holly
Title: Acting Superintendent
Date: 12-5-2008

Attachment 4
Sample Quarterly Visual Monitoring Inspection Log for Storm Water Pollution

Instructions: Every quarter you must visually inspect storm water outfalls at your facility. This attachment is a sample monitoring log.

Date	Time	Outfall Number or Description	Weather Conditions	Observations (contaminants observed/ erosion/sediment runoff	Probable Source of Any Observed Contamination	Action Taken to Prevent in Future
12-52008	Noon	SWM Pond	Dry	Everything Looked Good	N/A	N/A

Completed by: **Curtis Holly**
Title: **Acting District Superintendent**
Date: **12-5-2008**

Exhibit N
Watershed Stewards Academy Description

Watershed Stewards Academy

BRIEF PROJECT DESCRIPTION:

The Watershed Stewards Academy is an organized framework to educate community leaders to become "Master Watershed Stewards", trained to develop unique partnerships between citizens, organizations, businesses and local government to move to action to achieve restoration and preservation of their respective subwatersheds. The Academy and its operation is designed around partnering with government agencies, schools, citizens, businesses and watershed organizations to take ownership and responsibility for restoration of private property impacts on storm water quality and quantity.

BENEFITS:

The benefits of the Watershed Stewards Academy and its training of certified Master Watershed Stewards include the dissemination of sound technical information to a broad base of citizens and businesses regarding the impacts of storm water on their community and quality of life. Through the dissemination of this information, the respective communities will broaden their knowledge and understanding of why storm water is an important issue, how they contribute to pollutants that are conveyed by storm water to receiving streams, as well as how they must change behaviors to reduce pollutants at the source. They will learn their role and responsibility to retrofit their private property and community to manage storm water quantity and quality.

TARGETS:

The measurable outcome of this project is to educate an army of "Master Watershed Stewards" across the County on relevant Bay issues within their respective community and empower them to educate and engage a broad base of citizens and businesses in a coordinated effort to move to action on multiple initiatives designed to dramatically reduce the impacts of storm water on receiving streams and the Chesapeake Bay. This outcome is intended to leverage local government investment in restoration and preservation initiatives with parallel and equally as important private sector restoration and preservation initiatives on privately owned lands.

PROJECT NEED:

The Chesapeake Bay Agreement sets expectations for recovery of the Bay by 2010. It recognizes the importance of work between local governments, community groups and watershed organizations to develop and implement locally supported watershed management plans in two-thirds of the Bay watershed covered by the Agreement. These plans would address the protection, conservation and restoration of stream corridors, riparian forest buffers and wetlands for the purposes of improving habitat and water quality, with collateral benefits for optimizing stream flow and water supply. It also sets expectations for correction of nutrient and sediment-related problems in the Chesapeake Bay and its tidal tributaries sufficiently to remove the Bay and the tidal portions of its tributaries from the list of impaired waters under the Clean Water Act.

Despite many efforts to restore the Bay, the Chesapeake Bay Foundation continues to find our Bay scoring at below average with only minor improvements. In order to meet the Chesapeake

Bay agreements goals and to comply with the Clean Water Act, a different approach is necessary. While the causes and many solutions to Bay health have been identified, there has not yet been the cultural shift that has resulted in action necessary to make critical changes within our watershed. While it is incumbent upon our government to provide leadership and direction toward these changes, any significant change in the Bay will require the individual actions of each homeowner and business in partnership with the many active community organizations throughout the region.

APPROACH:

Our approach is to follow an organized framework to educate "community leaders" to move to action to restore watersheds in unique partnerships with citizens, businesses, community organizations, our school system and local government. We intend to identify individuals within communities who are capable of and willing to act as "Master Watershed Stewards". Through the Academy, we intend to educate an army of "Master Watershed Stewards" on relevant Bay issues to engage, empower and coordinate communities to take action. Actions would include small-scale efforts such as responsible lawn care, use of native plants, rain barrels, storm water infiltration, septic system education as well as large-scale community storm water infiltration or shoreline restoration projects. The Academy is designed to train the trainers. It is recognized that local government has the responsibility to provide leadership and direction for communities. Government cannot solve these problems alone. Citizens, businesses and organizations have a responsibility to take action to address storm water issues on private property and contribute to restoration initiatives. Active hands on participation of our schools will foster community involvement and education of our future leaders.

"Master Watershed Stewards" will learn, teach and apply alternative solutions in partnership with citizens, businesses and organizations to coordinate actions within communities. Through the Academy and the work of "Master Watershed Stewards" our approach is intended to network resources in support of partnerships between community leadership, business leadership, County government agencies, school communities, State government agencies and non-profit organizations. These partnerships will expand the capacity of government, community and business leadership to restore watersheds. The Academy will help develop new leaders, create strong partnerships and empower a broad audience to move to action.

The "Watershed Stewards Academy" builds on demonstrated success and cooperation on restoration efforts between Anne Arundel County Government and Anne Arundel County Public Schools. Both agencies provide combined experience and reputation for moving to action and getting the job done. By locating the Academy at Arlington Echo Outdoor Education Center we take advantage of existing training facilities, storm water management demonstration sites and best management practices. Both agencies, working together, provide vast experience for drawing upon existing technical and media resources.

Over the last 4 years, Anne Arundel County Department of Public Works and Arlington Echo Outdoor Education Center have partnered to include community involvement in dozens of County Capital Improvement Projects. As constituents learn about storm water issues and the many alternative solutions, they become both enthusiastic and overwhelmed. Many want to help but simply don't know how. Others are enthusiastic for a short while, but commitment to change soon fades. While we have been successful in creating positive change within many communities, much more is needed. In order to capitalize on these good intentions, each sub-watershed needs its own trained leader who can focus solely on that community's journey to change.

PROJECT OBJECTIVES:

Along with the creation of the "Watershed Stewards Academy", we intend to provide a robust organizational structure that supports the long-term viability and success of the community initiatives. The support structure will include an:

1). Advisory Board
2). Academy Leadership Team
3). Community Stewardship Coordinator
4). Consortium of Support Professionals and;
5). Master Watershed Stewards

The role of the Advisory Board will be to provide long-term vision and sustainability. We intend to establish 501C(3) status and rely on the Board to recruit funding, award small watershed grants, explore transferability of the concept to other local jurisdictions and evaluate measures of success. Board membership will include diverse representation of local community and business leadership.

The role of the Academy Leadership Team is to provide day-to-day guidance and direction. It will be responsible for developing the Academy's Strategic Plan, engaging stakeholders, identifying potential Master Watershed Stewards, coordinating leadership team resources, providing program oversight and support, linking Master Steward Projects with County watershed management plans and evaluating Academy success. Representation of the team will include the Department of Public Works and Arlington Echo Outdoor Education Center.

The role of the Community Stewardship Coordinator is to empower Master Watershed Stewards to move to action through a "Trainer of Trainers" model. The Coordinator will assist the Academy Leadership Team's recruitment of Master Watershed Stewards. This individual will also coordinate Master Watershed Stewards certification training and professional development; compile and maintain a library of technical and media resources; serve as a liaison between Master Watershed Stewards and the Consortium of Environmental Support Professionals; support Master Stewards in Program and Project development; and coordinate Arlington Echo resources (building use, demonstration areas, GIS resources, etc.) to assist the Master Stewards.

The role of the Consortium of Support Professionals is to provide training support by assisting Master Stewards in educating stakeholders. The Consortium will also provide technical assistance by consulting on design and development of watershed restoration projects. They will also fulfill the role of a "speakers bureau". Representation will include professionals such as River Keepers, Environmental Contractors, Native Plant Experts, Environmental Non-Profits, Academic Institutions, Group Facilitation Consultants and staff from Federal, State and Local Governments.

The role of the Master Watershed Stewards will be to provide leadership to communities to move to action. They will engage and educate citizens, businesses and organizations within sub-watersheds on relevant issues. They will coordinate small-scale action on private property such as installation of rain gardens, green roofs, rain barrels and septic retrofits as well as large-scale restoration efforts such as bio-retention areas or shoreline restorations on community property. They will seek partnerships with County Capital Improvement Projects.

The "Watershed Stewards Academy" will provide on-going support structure to Master Watershed Stewards including:

1). Certification Program
2). On-going Professional Development
3). Facilitation of a Network of Master Stewards
4). Tool Box for Sustaining Action
5). Funding Resources for Restoration Projects

Certification requirements will include as a minimum:

1). Completion of the Watershed Steward Academy Course
2). Educational Outreach to Citizen and Business Communities
3). Execution of a Community Watershed Project.

Certification maintenance will include as a minimum:

1). Provision of Annual Certified Volunteer Service
2). Completion of Certified Continuing Education

Master Steward on-going professional development will include as a minimum:

1). How-To Workshops
2). Capacity Building
3). Field Applications and Demonstration Sites
4). Networking with Environmental Professionals

It is anticipated networking will involve bimonthly meetings of Master Stewards to:

1). Facilitate Peer Support and Review
2). Exchange Information, Experiences and Resources
3). Collaborate on Restoration and Preservation Initiatives
4). Build on Successes
5). Create a Sense of Unity and Support

The Tool Box for Sustaining Action will include:

1). Alternative Solutions with How-to Guides
2). Library of Technical and Media Resources
3). Inventory of Contacts for Technical Assistance
4). GIS Resources
5). Academy Web-Page

Funding Resources for Restoration Projects will include:

1). Grants from Foundations and Governments
2). Sponsorships from individuals and businesses
3). In-kind contributions

EVALUATION:

Our strategy for measuring the Academy's success includes evaluating key performance measures of the Academy's overall performance as well as results accomplished by the Master Watershed Stewards during their period of seeking certification and annually thereafter.

Academy measures of performance will include:

1). The Number of Master Steward Training Sessions
2). The Number of Master Stewards Certified
3). The Degree of Involvement and Participation of the Consortium of Support Professionals
4). How Extensive the Tool Box of Resources are Utilized in Accomplishing on the Ground Actions,
5). Survey of Master Watershed Stewards to Determine How Effectively the Academy is Meeting their Needs as they Move to Action within their Communities
6). Evaluation of the Level of Support Funding received from Corporate Sponsors, Foundations, Private Contributions, Federal and State Grants, County Project Sponsorship and In-Kind Contributions

Master Watershed Stewards measures of performance will include:

1). The Number of Community and Business Presentations and Workshops Conducted to Build Capacity throughout the Citizen and Business Communities to Move to Action
2). The Number of Stewardship Projects Completed and their Anticipated Contribution to Watershed Restoration and Preservation
3). Surveys of Communities' Watershed Literacy Prior to the Master Watershed Stewards Intervention Versus their Literacy following the Intervention

Our objective is to insure the Watershed Stewards Academy will empower communities to transform the landscape, restore ecosystems and make a real impact on our restoration initiatives, one watershed at a time. Our desire is to have a small army of Master Watershed Stewards working simultaneously within all of our sub-watersheds, increasing the knowledge of all our citizens and businesses in a way that they take ownership in the fact "we are all part of the problem and we must all take part in the necessary solutions".

PARTNERSHIPS:

The Watershed Stewards Academy is founded on a successful partnership with Anne Arundel County Department of Public Works and Arlington Echo Outdoor Education Center. While both agencies will provide day-to-day leadership and direction, the Academy will be housed at Arlington Echo Outdoor Education Center. Arlington Echo offers excellent indoor and outdoor facilities for small and large group hands on training. These facilities will be used for the Master Steward Certification Course and ongoing training, bi-monthly networking meetings, and will be available for Master Stewards to conduct meetings and training for their constituents. The Community Stewardship Coordinator will be supported with an office at Arlington Echo (including, phone, fax, computer, office supplies, and AV equipment) and will be directly supervised by Stephen Barry, Director of Outdoor Education. Previously developed BMPs (i.e. rain gardens, native plants, rain barrels, living shoreline, green roof) will be used for demonstration. A resource area, including a library of technical and media resources (including

GIS) will be made available for Master Stewards. Most importantly, Arlington Echo provides the educational expertise needed to successfully educate leaders to move to action.

In addition to leadership and oversight, AA County DPW will contribute to the Watershed Stewards Academy in three main ways (1) provide training and support expertise (2) contribute use of facility resources such as GIS and Media studio for the production of educational DVDs, and (3) funding support for projects. DPW employs a variety of personnel who will assist the Watershed Stewards Academy by providing portions of the initial certification course (i.e., GIS training or Watershed modeling), as well as serving as resource persons for Master Stewards as they work through their projects. DPW expertise includes engineering; water quality, native plants, GIS and other computer technical expertise. A close connection with DPW will allow Master Stewards to have a countywide perspective as they focus efforts on their own area. DPW will involve Master Stewards in Capital Improvement Program projects within their sub-watershed, so that they may use those projects as a platform to educate and involve citizens, businesses and organizations.

DPW and Arlington Echo have built strong partnerships with many environmental organizations and community groups. The Watershed Stewards Academy will seek to leverage the experience and success of these partnerships to build similar relationships with their citizen and business communities, environmental professionals, and the Academy's Consortium of Support Professionals. The most important partnerships are those that will be developed between homeowners, businesses and organizations as they collaborate with their Master Steward to take ownership of the storm water in their own sub-watershed.